

**TO WHAT EXTENT CAN A GUIDED IMAGERY
INTERVENTION DESIGNED TO ENHANCE
SELF-ESTEEM HELP TO REDUCE SOCIAL
EXCLUSION IN KEY STAGE 2?**

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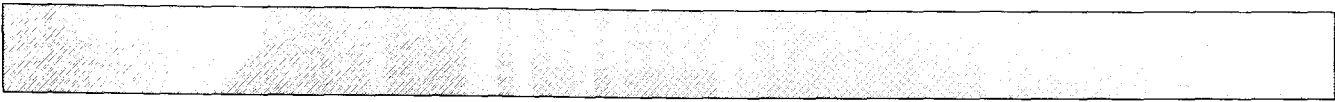
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The topics of self-esteem and social inclusion have been subject to much research in educational psychology, with positive correlation often being found to exist between the two. However, very little research has been conducted into the efficacy of guided imagery – a person-centred cognitive therapeutic technique – on enhancing either self-esteem or social inclusion, particularly in school-age populations. Identifying the gap in existing literature, this study therefore assessed the extent to which a five-session guided imagery intervention was associated with increases in both self-esteem (as measured by the Lawrence Self-Esteem Questionnaire; Lawrence, 1982) and social inclusion (as measured by the Social Inclusion Survey; Frederickson & Graham, 1999, and the Peer Problems and Prosocial Behaviour subscales of the Strengths and Difficulties Questionnaire; Goodman, 1997). This quantitative data was supplemented by a limited collection of qualitative questionnaire data, which was analysed using content analysis. Both forms of data were collected from 46 Year 4 and 5 pupils from three mainstream primary schools, who had been randomly allocated either to experimental groups or waiting list control groups. Qualitative data was also collected from the four members of school staff who had been trained in facilitating the intervention. Data analysis indicated that the guided imagery intervention had few salient effects on self-esteem or social inclusion as measured by the instruments used, but there was some qualitative evidence of increased self-esteem and social inclusion of participants in the experimental condition. The results of this study are discussed in the context of existing literature, and implications for future research and practice are explored.

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Chapter 1

Introduction

1.1 Context and background to this study

1.1.1 Context

This study represents the contribution of the researcher, a Trainee Educational Psychologist (Trainee EP), towards a larger scale piece of research, the National Development and Research (D&R) Programme. The D&R Programme aims to aggregate Trainees EPs' individual pieces of doctoral research at a national level and use them to address four specific areas, which have been identified by Principal EPs as mapping onto the five outcomes identified in the Government's Every Child Matters Agenda (DfES, 2005) and being priorities for research and development. The four areas identified for the 2007-10 cohort of Trainee EPs include the question *"Under what circumstances might targeted academic interventions, social skills, self-esteem or anger management groups in schools prevent exclusion?"*, which was chosen as the context for the present study. The term "exclusion" was further defined by the researcher as "social exclusion" to provide a more specific focus for evaluation.

1.1.2 Background

This umbrella question provided an opportunity for the researcher to further evaluate and develop an intervention programme that she devised in her previous employment as an Assistant EP. After being asked to devise an intervention package that could be used in schools to enhance the self-esteem of children in Key Stage 2, she decided guided imagery was a creative and accessible means of meeting this aim, with a limited range of materials already being available to support this (e.g. Berkovitz, 2000; Plummer, 1998). By coincidence, the author of some of these materials, Deborah Plummer, was working as a Speech and Language

Therapist in the same city as the researcher and was able to provide some guidance on the development of the package. The finished intervention package was then piloted with Year 5 children in three schools in the city, and pre-post intervention measures indicated some significant improvements in their self-esteem.

Guided imagery as a technique is an example of person-centred cognitive therapy, where a facilitator leads participants firstly through a relaxation exercise and then through a situation or journey in their mind. It is hypothesised that bodily or behavioural change can result from this experience, which is normally supported by a process of exploration and discussion. Although guided imagery has been subject to some research in the fields of complementary medicine and therapy, initial literature and internet searches conducted by the researcher suggested that very little research had been conducted into the extent to which guided imagery interventions can specifically enhance self-esteem or social inclusion, particularly in children. With some adaptations, the guided imagery intervention devised by the researcher was therefore evaluated more rigorously in the present study to see what effect it could have upon children's self-esteem and social inclusion.

1.2 Research questions addressed by this study

The overarching question asked by this particular study therefore became *"To what extent can a guided imagery intervention designed to enhance self-esteem help to reduce social exclusion in Key Stage 2?"*. To investigate this, two main research questions were addressed by this study:

- **To what extent can guided imagery enhance the self-esteem of children in Key Stage 2?**
- **To what extent can guided imagery increase the social inclusion of children in Key Stage 2?**

A third subsidiary question,

- **To what extent are the self-esteem and social inclusion of children in Key Stage 2 associated?**

was also included to help synthesise the main two questions.

1.3 Structure of this study

Chapter 2, the ***Literature Review***, will present a detailed review of the key literature surrounding the themes of self-esteem, social exclusion/inclusion, and guided imagery. This will help to place the present study within the context of previous research. A structured literature search process will also be described, which aimed to identify existing research that addressed the two main research questions. From here, conclusions will be drawn and the rationale for this study will be outlined.

Chapter 3, the ***Methodology***, begins by exploring some of the theoretical issues underpinning research in the social sciences. The current study will be placed within its methodological context, and then a detailed account of its design and procedure will be given.

Chapter 4, the ***Results***, starts by explaining the quantitative and qualitative analysis techniques used in this study. Key findings will then be detailed in relation to each research question.

Chapter 5, the ***Discussion***, reviews the results of this study in relation to each research question, making links with existing literature. It also evaluates the extent to which the chosen methodology was appropriate and effective, with limitations

being acknowledged. The implications of this study for future research and practice will also be presented.

Finally, Chapter 6, the ***Conclusion***, assimilates the main findings of this study in relation to each research question, and outlines how the study has made an original contribution to existing research and knowledge. Appendices and references follow this chapter.

Chapter 2

Literature Review

The following literature review will begin by summarising key research, arising from a general reading of books and articles of relevance, which relates to each of these issues:

- *Self-esteem and its implications*
- *Social exclusion, social inclusion and their implications*
- *Links between self-esteem and social exclusion/social inclusion*
- *Guided imagery and its applications*

Following this, a systematic literature search process will be described, the aim of which is to identify more specifically the most current and relevant existing studies that have addressed each of the main research questions. The identified articles will then be critically analysed and reviewed, to inform both the conclusions drawn and the rationale for this study.

2.1 Self esteem and its implications

2.1.1 Self-esteem as a construct

Unlike guided imagery, “self-esteem” is a widely used term that has a certain level of common understanding. In academic terms, it is estimated that over a thousand articles are published every year that refer to it (Emler, 2001). However, although decades’ worth of literature illustrates the extent to which self-esteem has been debated, the vast array of definitions, models and measures associated with it suggest a lack of consensus on how it should be conceived (Tafarodi & Milne, 2002). One obvious problem is the fact that the term “self-esteem” has been used almost

interchangeably with several different terms, for example “self-concept” (e.g. Ireson & Hallam, 2001; Muijs & Reynolds, 2001), “self-image” (e.g. Hughes, 1984), “self-confidence” (e.g. Kristjánsson, 2007), and “self-efficacy” (e.g. Bandura, 1997), all of which actually have subtly different meanings (Wells & Marwell, 1976). It is this lack of clarity and the sometimes liberal use of “self-esteem” as an umbrella term that prompted Wylie (1979) to brand much of the literature on the self “*uninterpretable*”.

Given the debate surrounding the terminology of self-esteem, it is important to try and gain an understanding of what it is broadly understood to mean. Generally, definitions of self-esteem either refer to the individual’s feelings of self-worth (e.g. Coopersmith, 1967; Rogers, 1961), which describe the extent to which the person feels loveable (Storr, 1997); or their feelings of self-efficacy (e.g. Bandura, 1997; James, 1950; White, 1963), which describe the extent to which the person feels productive and useful. However, more contemporary models suggest that self-esteem should actually be thought of as a combination of both these attributes. The work of Mruk (1999), for example, suggests that for a person to have a “high” level of self-esteem, they need to feel both confident about their worth as an individual (“*I am a good person, entitled to respect and consideration from others*”; Miller & Moran, 2005, p28) and confident in their own abilities (“*I am able to meet the challenges I face*”; Miller & Moran, 2005, p28). Studies by Tafarodi & Swann (1995) and Tafarodi & Milne (2002) support this idea of a composite model, identifying self-liking and self-competence as being the two factors underlying self-esteem.

An advantage of the composite model is that it accounts for the commonly-held belief that a feeling of self-efficacy is vital if an individual is going to achieve goals and do well (e.g. Kristjánsson, 2007; Bandura, 1997). It also accounts for the following criticism that can be made of James’ (1890/1950, Chapter 10) assertion that self-esteem reflects a person’s perception of the ratio of their successes to

their aspirations. If James' assertion is correct, then it follows that one of the easiest ways to have a high level of self-esteem is to simply dispense with their aspirations and standards. Instead, therefore, Kristjánsson (2007) suggests that self-esteem should actually be thought of as the extent to which a person feels "*worthy to aspire*" (p551); a conclusion which alludes to both self-liking and self-competence.

James' (1890/1950) theory of self-esteem bears striking resemblance to that proposed by Burns (1982), who said that self-esteem is defined by a person's perception of the difference between their "actual" and "ideal" selves. Later research extends this argument, proposing that an individual's "global self-esteem" can actually be analysed at the level of their self-esteem in a number of different "domains" (Rosenberg, Schooler, Schoenbach & Rosenberg, 1995; Woike & Baumgardner, 1993). Examples of domains would include academic self-esteem, physical self-esteem or social self-esteem, all of which can of course be broken down further into component sub-domains such as mathematical academic self-esteem, scientific academic self-esteem and so on. From here it is a short step to conceptualising self-esteem as multi-dimensional and hierarchical in nature (Byrne & Shavelson, 1996; Marsh, Byrne & Shavelson, 1988; Shavelson & Bolus, 1982; Shavelson, Hubner & Stanton, 1976), as illustrated graphically by Shavelson *et al* (1976):

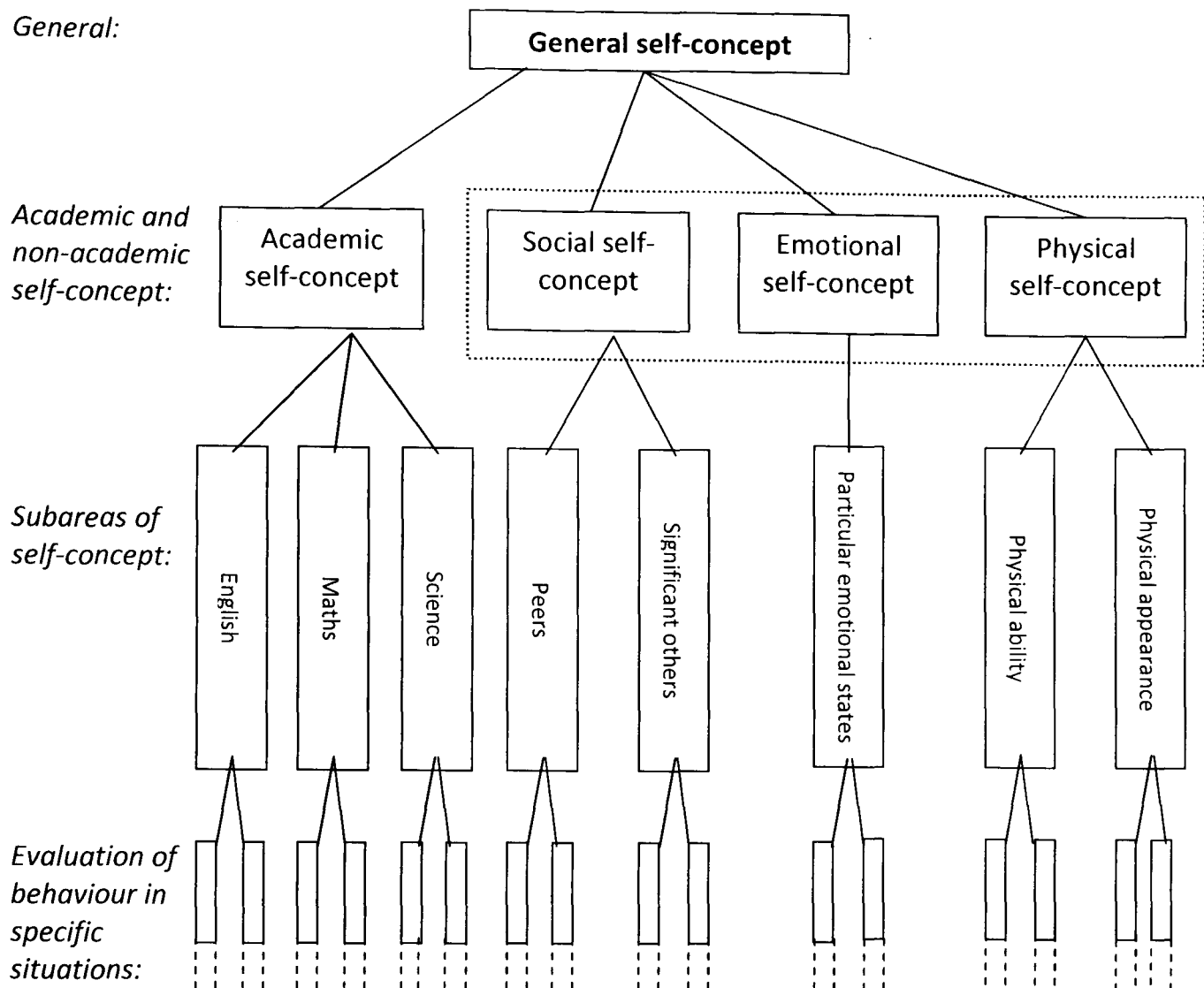


Figure 1: Hierarchical structure of self-concept (Shavelson et al, 1976, p413)

Shavelson *et al*'s model was based upon a number of underlying principles, including firstly that people organise the vast amount of information they hold about themselves into a system of categories which they gradually link and compare, and secondly that their perception of their behaviour in any given situation contributes to their perception of the self at higher levels of the hierarchy. A further assumption of the model is that self-concept becomes increasingly multi-faceted over time, as the individual moves towards adulthood. A recent study by Marsh & Ayotte (2003) support the idea of a multi-dimensional model of self-esteem, summarising that a number of studies into – and inspired by – the Shavelson *et al* model have “...supported the multidimensional structure of self-

concept and demonstrated that self-concept cannot be adequately understood if its multidimensionality is ignored” (p687).

The idea of a multidimensional, hierarchical model is supported further by Marsh, Craven & Martin (2006), who emphasise the “*ephemeral*” nature of self-esteem and its vulnerability to “*...situation-specific context effects, short term mood fluctuations, and other short-term time-specific influences*” (p22). This extends a fourth assumption made by Shavelson *et al* (1976), that an individual’s level of global self-esteem remains fairly stable over time but that their momentary or situation-specific judgements of self-esteem can fluctuate around this typical level depending on the situation. More recently, Crocker & Wolfe (2001) have conceptualised this in a model of global self-esteem that conceives global self-esteem as “*...both a trait and a state*” (p594), which emphasise this distinction. It therefore appears that global self-esteem is accepted to be an overall reflection of self-esteem in a number of different domains, and that global self-esteem tends to remain stable over time even though an individual’s level of self-esteem in different domains can fluctuate depending on a number of factors.

2.1.2 “High” and “low” self-esteem

There is an implication in the literature reviewed above that self-esteem can be measured, and that different people can have different “levels” of self-esteem. Reference is often made to “high” and “low” self-esteem, with the general assumption being that high self-esteem is a good thing while low self-esteem is a bad thing. This will be discussed in more detail later on, however the concept of different levels of self-esteem will now briefly be considered.

As described above, self-esteem is a personal judgement about the self – a combination of a person’s feelings of self-worth and self-efficacy. An individual’s level of self-esteem is therefore directly reflective of the value they place on

themselves, making it “...*the evaluative component of self-knowledge*” (Baumeister, Campbell, Krueger & Vohs, 2003, p2). High self-esteem therefore relates to a favourable evaluation of the self, with low self-esteem relating to an unfavourable evaluation. This process of self-reflection is thought to be a uniquely human trait (Andrews, 1998), and demonstrates our ability to distinguish between the self as “I” and the self as “me” (James, 1890/1950).

If self-esteem reflects a personal judgement about the self, the notions of high and low self-esteem become somewhat arbitrary, reflecting perceptions rather than reality (Baumeister *et al*, 2003). There is also a danger, then, that the boundary between perception and reality can become blurred, and that the individual’s evaluation of themselves can be at odds with the evaluation that other people would make of them. High self-esteem can therefore be seen on one hand to indicate “...*an accurate, justified, balanced appreciation of one’s worth as a person and one’s successes and competencies*”, however it can also reflect “...*an inflated, arrogant, grandiose, unwarranted sense of conceited superiority over others*” (Baumeister *et al*, 2003, p2).

The latter of these refers to people who have narcissistically high self-esteem; who are clinically defined as being individuals who have an inflated sense of being special or unique, who harbour fantasies of beauty or personal brilliance, and a belief that they are entitled to privileges and admiration by others (American Psychiatric Association, 2000). Although narcissism has been found to predict aggression (Bushman & Baumeister, 1998), high self-esteem when based on a healthy and realistic awareness of both our desirable and undesirable characteristics (Swann, Stein-Seroussi & Giesler, 1992; Trope, 1986) is generally regarded as a positive attribute to have. Low self-esteem, on the other hand, is commonly associated with a number of “*crippling*” (Cigman, 2005, p105) problems such as anxiety, depression, fear of intimacy or success; to the extent that Davis (1988) proclaimed that “...*virtually every social problem can be traced to people’s*

lack of self-love" (p10). The validity of such claims will be examined later on, however suffice to say that academic and professional psychologists are generally more cautious about supporting such strong categorical claims. Perhaps, for now, it is simply worth considering Ellis' claim (cited in Epstein, 2001, p72) that *"...self-esteem is the greatest sickness known to man or woman because it's conditional"*; the implication being that *"...people would be better off if they stopped trying to convince themselves they are worthy"* (Baumeister *et al*, 2003, p3).

2.1.3 The measurement of self-esteem

Despite the notion of a level of self-esteem being somewhat arbitrary, it is possible to "measure" a person's self-esteem, most commonly by using questionnaires or inventories. However, there are a number of factors to consider when assessing the validity of such methods. Firstly, by its very nature, the measurement of self-esteem relies almost exclusively upon self-report (Baumeister *et al*, 2003), for example answering the question *"Is your school work good?"* (Maines & Robinson, 1988, item 1) or *"Are there lots of things about yourself you would like to change?"* (Lawrence, 1982, item 10). As Brinthaup & Erwin (1992) point out, this assumes a level of verbal competence and the ability to reflect objectively about the self; and both these attributes will vary significantly from respondent to respondent. In addition to this, self-report by nature is not objective, so it is impossible to question whether an individual's level of self-esteem in, for example the academic domain, is accurate or not; even when considered in light of objective measures such as school examination scores.

A further criticism of self-report measures is that they can be heavily influenced by the respondent's affective and motivational state at the time, and can also be significantly affected by their desires for approval and to appear competent (Brinthaup & Erwin, 1992). This latter point is supported by Blascovich & Tomaka (1991), who reviewed several measures of self-esteem (such as those designed by Rosenberg, 1965; and Fleming & Courtney's 1984 revision of the scale proposed by

Janis & Field, 1959) and concluded that scores on such measures are somewhat contaminated by the respondent's efforts to present themselves in a good light. One way of partially resolving this issue is to ask respondents to also complete questionnaires of self-deception or social desirability, as researchers have found that individuals whose high self-esteem is considered "defensive" in this way tend to also score highly on such measures (e.g. Schneider & Turkat, 1975; Paulhus, 2002).

One final point to note about the measurement of self-esteem is that unlike other measurement instruments such as cognitive tests, which are constructed to yield results symmetrically distributed about a mean, the average score on self-esteem scales typically lies far above the midpoint of the scale, sometimes by more than one standard deviation (Baumeister, Tice & Hutton, 1989). This indicates that the distribution of results yielded by self-esteem scales is skewed towards people scoring highly, or at least "above average" (Baumeister *et al*, 2003). When researchers then split samples at the median to distinguish between those people with high and low self-esteem, the range of scores amongst those classed as having low self-esteem can therefore be much greater than the range amongst those classed as having high self esteem; and many of those classed as having low self-esteem can actually have scored above the midpoint of the scale. As Baumeister *et al* (2003) conclude, this means that the classifications of high and low self-esteem are therefore only relative, not absolute. This is an important point to bear in mind when reviewing research where the self-esteem of participants has been labelled in this way.

2.1.4 The apparent value of self-esteem

As previously mentioned, it is generally accepted – even "intuitively recognised" (Baumeister *et al*, 2003) – that a healthy level of self-esteem is beneficial to a person's development and achievement. One theory is that self-esteem is a crucial component of the confidence, and therefore the motivation, that individuals need

to be able to succeed both academically and as people (the “motivational claim”, Ferkany, 2008; see also Cigman, 2004).

From these commonly-held principles it is easy to see why the development of self-esteem has become an increasingly prominent part of the curriculum in school, with educational policy documents such as the Children’s Plan (DCSF, 2007) and the Social and Emotional Aspects of Learning programme (SEAL; DfES, 2005) reflecting this. However, the evidence base on which such claims are made deserves scrutiny. A huge volume of research has been published into the nature and validity of the links made between self-esteem and a range of social and academic outcomes, so much so that Kristjánsson (2007) comments that articles on the topic “...continue to appear with dreary regularity” (p247). Key literature in the field will now be discussed and it will become clear that the relationship between self-esteem and variables such as academic achievement, behaviour, and depression is far from clear-cut.

2.1.4.1 - Links between self-esteem and academic achievement

Many studies have investigated the links between self-esteem and academic achievement. After all, there are plausible reasons to assume that a high level of self-esteem will lead to improvements in academic performance (Coopersmith, 1967); because, as Cigman (2004) suggests, individuals with high self-esteem are likely to have the confidence to tackle difficult tasks, whereas an individual with low self-esteem may feel the cause is hopeless. Furthermore, individuals with high self-esteem may also have higher aspirations and be “...more willing to persist in the face of initial failure and less likely to succumb to paralyzing feelings of incompetence and self-doubt” (Baumeister et al, 2003, p10). However, an analysis of empirical studies into this correlation suggests that the relationship “...is neither precise nor clear” (Hansford & Hattie, 1982, p124).

Hansford & Hattie's (1982) study is one of the most commonly-cited studies in this field, as they performed a meta-analysis of the results of 128 studies to establish whether "self" and measures of performance and achievement are related. The studies investigated nearly 203,000 pieces of data (representing 68,756 individuals) and the results of these 128 studies were converted to a common measure, correlation coefficients. The authors found that these 1136 correlation coefficients ranged from $-.77$ to $.96$, with a mean of $-.212$; and noted that the vast majority of correlations were positive ($n = 944$), whilst some were negative ($n = 170$) and a few were zero ($n = 22$). Using various estimates of the average range or central tendency, Hansford & Hattie established that the average relationship between self and measures of performance and achievement was between $.21$ and $.26$, summarising that *"...it may be more meaningful to say the common variance is between 4 and 7 percent"* (p127). Although this study was conducted over 25 years ago so may no longer be considered current, it is still often cited in self-esteem literature as it provides some empirical evidence of a link between self-esteem and academic achievement.

More recently, a British study by Davies & Brember (1999) examined the relationship between self-esteem (measured by the Lawseq questionnaire; Lawrence, 1982) and reading and mathematics attainment (measured using the Primary Reading Test, levels 1 and 2; France, 1981; and the Mathematics 7 and 11 tests; NFER, 1985, 1987a) in eight cohorts of Year 2 and Year 6 children ($n = 3001$). This eight year cross-sectional study found significant positive correlations between self-esteem and academic performance, with an average correlation coefficient of $.12$. Similar relationships were also reported by Bowles (1999), who found a correlation of $.29$ between student's self-esteem and their most recent grades in mathematics and English (Baumeister *et al*, 2003), and Kugle, Clements & Powell (1983), who found a correlation of $.18$ between self-esteem and tests of reading achievement.

There does therefore seem to be some evidence that self-esteem is related to academic performance. However, having reviewed the above studies, Baumeister *et al* (2003) concluded that this relationship appeared to be “...*positive but weak and ambiguous*” (p13), with the direction of causality remaining unclear. For example, it is difficult to ascertain whether higher self-esteem creates the conditions necessary for doing well at school, or whether doing well at school helps enhance the student’s self-esteem. It is also possible, as the following studies point out, that there are other factors that mediate or influence this relationship.

A longitudinal study by Bachman & O’Malley (1977) investigated this in a study of 1600 young men. Participants in this “...*early and still well-respected study*” (Baumeister *et al*, 2003, p11) completed the Rosenberg (1965) self-esteem scale at five time points between 1966 (when participants were in the 10th grade) to 1974 (when they had left school), and results were correlated against factors such as school performance and the final degree that the men achieved on leaving school. Contrary to expectation, the authors found that the participants’ 10th grade self-esteem correlated more strongly with their later educational attainment (e.g. high school dropout, some college education, bachelor degree, post-graduate education) than did self-esteem measured after the educational attainment levels had been reached; this did not support Bachman & O’Malley’s hypothesis that higher educational achievement would then contribute towards self-esteem later on. When using path analysis to examine the results in more detail, Bachman & O’Malley found that high-school self-esteem only correlated with later achievement because both were heavily influenced by prior causal factors such as academic ability and past academic performance. This led them to conclude that “...*self-esteem adds very little by way of a contribution to later attainment*” (p377), which suggested that self-esteem on its own does not necessarily predict achievement.

Similar findings were reported by Maruyama, Rubin & Kingsbury (1982). Maruyama *et al* also found a correlation but no causal relationship between self-esteem and

school performance in participants aged between 4 and 15 years; concluding that factors such as IQ and social class were more responsible for affecting levels of both self-esteem and academic achievement. A final study that drew similar conclusions is the “*methodologically sophisticated*” (Baumeister *et al*, 2003, p12) longitudinal study by Pottenbaum, Keith & Ehly (1986), in which a cross-lagged panel design was used to try and define the causal relationship between self-esteem and academic achievement. Using a sample of more than 23,000 high school students and assessing their self-concept and academic achievement in 1980 and 1982, the authors found that there was no significant causal relationship between the two variables, but that “...*the observed relation is the result of one or more uncontrolled and unknown third variables*” (Pottenbaum *et al*, 1986, p142). It is interesting to note that the findings of these three large-scale, longitudinal and detailed studies are consistent with each other; this would indicate some reliability in their findings.

From the literature reviewed above, it therefore appears that self-esteem has little or no causal effect on academic achievement or performance at school. Indeed, the links between the two variables are loose at best (Cigman, 2008) and are more likely to reflect underlying variables such as ability and social class (Baumeister *et al*, 2003). However, bearing in mind the apparently hierarchal and domain-specific structure of self-esteem, it is worth noting that none of these studies specifically examined the link between *academic* self-esteem and academic achievement. More recent studies have suggested that a stronger relationship may exist between these two variables than between global self-esteem and academic achievement (Guay, Larose & Biovin, 2004; Maclellan, 2005); in fact Muijs (1997) found this to be the case in a large sample of school age children.

2.1.4.2 - Links between self-esteem and aggressive/anti-social behaviour

In addition to whether self-esteem is linked to academic outcomes, there has been a lot of interest in whether self-esteem is linked to aggression and other anti-social behaviours. Two opposing hypotheses can be identified within the literature; the

low self-esteem hypothesis (Donnellan, Trzesniewski, Robins, Moffitt & Caspi, 2005; Fergusson & Horwood, 2002; Gjerde, Block & Block, 1988) and the **defensive or pseudo self-esteem hypothesis** (Branden, 1969; Mruk, 1999), also called the **disputed self-esteem hypothesis** (e.g. Baumeister, Bushman & Campbell, 2000; Baumeister, Smart & Boden, 1996; Bushman & Baumeister, 1998; Hymel, Bowker & Woody, 1993). The former theory, which proposes that aggression and anti-social behaviour are an expression of the individual's low self-esteem, fits the commonly-held view that such behaviours are a facade for their insecurities and self-doubts (Baumeister *et al*, 2003). The latter theory, meanwhile, proposes that such behaviour emerges when the individual's high self-esteem is disputed or threatened by others (Diamantopoulou, Rydell & Henricsson, 2008).

Very little evidence appears to exist to support the low self-esteem hypothesis. In fact, Baumeister *et al* (2003) state that *"This view appears to have emerged from clinical impressions rather than any single theoretical formulation or line of empirical evidence"* (p21). However, a study by Trzesniewski, Donnellan, Robins, Moffitt & Caspi (2002, Study 1) does provide some support for the idea that low self-esteem can cause externalising behaviour, a term which includes delinquency and antisocial misbehaviour (the term "externalising" implying that the individual transfers their problems onto others). This large scale (n = 726) longitudinal study followed students between the ages of 11 and 13 years, assessing their level of externalising behaviour from three sources (participants' self-reports plus information gained from their teachers and parents; all based upon the American Psychiatric Association's diagnostic criteria for conduct disorder). Trzesniewski *et al* found a significant negative correlation between self-esteem and externalising behaviour at both time points (correlation coefficients ranged between -.16 and -.25), also finding that self-esteem at age 11 predicted externalising behaviour at age 13 (correlation coefficients ranged between -.19 and -.21). Furthermore, this relationship was found to be independent of relationships with parents or peers, IQ and socio-economic status. The findings of this study provide considerable support to the low self-esteem hypothesis; particularly when viewed in the context of its

longitudinal design, large sample size and triangulated method of measuring externalising behaviour.

High self-esteem, meanwhile, has been associated with aggressive and antisocial behaviours such as criminal activity and racial prejudice (Emler, 2001), along with stronger in-group favouritism, which may increase social prejudice and isolation of others (Baumeister *et al*, 2003). It is, however, not clear in these studies whether “high self-esteem” relates to a high self-esteem that is actually very defensive (as per the defensive or pseudo-self-esteem hypothesis), or whether it relates to a genuine and healthy high self-esteem. Studies that have looked more specifically at the defensive self-esteem hypothesis have demonstrated interesting findings. For example, Salmivalli, Kaukiainen, Kaistaniemi & Lagerspetz (1999) found that adolescents who were classified as having defensive high self-esteem (as characterised by a very high score on a scale of defensive egotism, alongside a higher than average score on scales of self-rated and peer-rated self-esteem) were significantly more likely to be described by their peers as either being bullies or being someone who reinforces bullying behaviour; for example by encouraging bullies or laughing at instances of bullying. Although the inclusion of peer-rating scales in Salmivalli *et al*’s design increased the validity of their assessments, their reliance upon self-report measures means their data may have been skewed by respondents providing socially-desirable answers; however overall their study does lend support to the defensive self-esteem hypothesis. This defensive self-esteem hypothesis is further supported by Olweus (1990, 1994) who found that, contrary to popular opinion, children classed as bullies tended to report less anxiety and were more self-assured than other children.

Overall, it therefore appears that high self-esteem is more strongly linked to aggressive and anti-social behaviours than low self-esteem is. However, the results of such studies need to be considered in light of the concepts of defensive self-esteem and narcissism. To simply conceptualise high self-esteem in terms of a

unitary construct discounts the important distinction between people who belong in these categories, and those who genuinely have a healthy high self-esteem. One further point to note is that, like those into academic achievement, the studies reviewed above shed little light on the direction of causality between self-esteem and aggressive and antisocial behaviours. It may be the case, as Maclellan (2005) suggests, the level of one's self-esteem is more of a consequence, rather than a cause, of their behaviour.

2.1.4.3 - Links between self-esteem and well-being

A number of studies have examined the link between self-esteem and a number of indicators of well-being, such as depression, physical condition and anxiety. Substantial correlations have been found between self-esteem and "happiness", most notably through a large-scale international study carried out by Diener & Diener (1995). In this study, data was collected from more than 13,000 college students, from 49 different universities in 31 countries and 5 continents, and the correlation between self-esteem and life-satisfaction was found to be .47. Similar findings have been reported by Shackleford (2001), who found a significant correlation between the self-esteem and happiness (in terms of global, sexual and emotional satisfaction) of young to middle aged couples who had been married within the past year; and by Furnham & Cheng (2000), who found self-esteem to be the most dominant and powerful predictor of happiness in a sample of 406 people ages between 14 and 28 years. Although these studies have been conducted in adult populations so do not directly generalise to children, they indicate some of the links that have been found to exist between self-esteem and well-being.

Links have also been found between low self-esteem and physical well-being. In a six month longitudinal study of 75 married couples conducted by DeLongis, Folkman & Lazarus (1988), it was found that people with low self-esteem appeared more likely to become ill or suffer from other physical problems in connection with stressful daily events. Later work by Corning (2002) incorporated indicators of well-

being (including physical symptoms and distress) into a study of the ways in which women with high and low self-esteem reacted to perceived discrimination. Corning found that the effects on women with high self-esteem were weaker than the effects on women who had low self esteem. This study supports the idea that high self-esteem can help the individual to be somewhat more resilient to stressful or traumatic events (e.g. Arndt & Goldenberg, 2002); a theory known as the “anxiety buffer hypothesis” (for a review, see Pyszczynski, Greenberg, Solomon, Arndt & Schimel, 2004).

Correlations between self-esteem and depression, meanwhile, are generally only moderate, ranging from .4 to .6 (e.g. Joiner, Alfano & Metalsky, 1992). The general consensus is that low self-esteem is a risk factor rather than a predictor of depression, with self-esteem being only one of a collection of symptoms (Roberts & Monroe, 1999). However, it has been found that adolescents with low self-esteem are more likely to develop negative cognitive coping styles and have an increased risk of developing depression and suicidal tendencies (Kazdin, 1990; McFarlane, Bellissimo & Norman, 1995; Overholster, Adams, Lehnert & Brinkman, 1995). Overall therefore, it appears that a healthy high level of self-esteem somewhat helps to maintain an individual’s sense of well-being and helps to protect them from the potentially damaging effects of traumatic life events.

2.1.5 Conclusion

The evidence reviewed above, which represents just a sample of the huge range of research into self-esteem, presents a mixed picture of the role that self-esteem can play in a variety of outcomes. In general, it appears that there is a negligible relationship between self-esteem and academic achievement, but a more substantial relationship between self-esteem and different aspects of well-being. The relationship between self-esteem and aggressive and anti-social behaviour is more complex, with results needing to be considered in light of factors such as narcissism and the disputed self-esteem hypothesis. However, as few studies have

attempted to determine the direction of causality in these relationships, it is difficult to determine whether self-esteem is a contributor to or an effect of these outcomes. In addition to this, relatively little research appears to have been conducted into the effects of domain-specific self-esteem and domain-specific outcomes, with most studies predominantly focusing on global self-esteem.

Given this mixed picture, it is unsurprising that there is debate as to the salience of self-esteem, and an apparent “*backlash*” against its perceived importance (Mruk, 1999, in Miller & Parker, 2006, p19). Especially pertinent to this current piece of research is the debate surrounding the relevance of self-esteem in educational contexts, which is particularly lively. On one hand, educational philosophers such as Smith (2006) have asked why low self-esteem is seen as a “*defect*” (p56) and something which apparently needs to be addressed through interventions such as Circle Time (Mosley, 1998, 2004) or self-help manuals. Somewhat bluntly, Smith even concludes by stating that there is “*something chilling*” about situations that are contrived to ensure that children succeed (p57), and argues against the showering of children with “*...empty praise and blandishments of therapism*” (p57). Cigman (2005), meanwhile, agrees with these sentiments but argues that attempts to enhance self-esteem do play a “*vital role*” in education (p95), as long as they are based on genuine achievement rather than indiscriminate attempts to praise and boost the ego (Smith, 2006).

Perhaps the most useful conclusion to draw is that “*...high self-esteem appears to operate as a stock of positive feelings that can be a valuable resource under some conditions*” (Baumeister *et al*, 2003, p37). For example, people with high self-esteem appear to be generally more satisfied with their lives, and can often recover more quickly from situations of failure or stress. A second conclusion that can be drawn is that high self-esteem appears to be linked to higher levels of initiative, to either positive or negative effect. The study by Salmivalli *et al* (1999) provides an example of this, where high self-esteem was associated both with bullying

behaviour and with defending victims against bullies. Baumeister *et al's* (2003) definition of self-esteem fits with theories of resilience (e.g. Anthony, 1974; Rutter, 1979; Werner & Smith, 1982; Glantz & Johnson, 1999; Wang, Haertel, & Wahlberg, 1994), which is generally understood as the capacity to cope successfully and function effectively despite experiencing chronic stress or adversity, or following exposure to prolonged or severe trauma (Luthar, Cicchetti, & Becker, 2000, in Cicchetti & Rogosch, 2009). It also supports the notion that any intervention that aims to enhance self-esteem – such as the guided imagery intervention used in this study – should be embraced, particularly during childhood when children are particularly receptive to the feedback they receive about themselves.

2.2 Social exclusion, social inclusion and their implications

2.2.1 Social exclusion and social inclusion as constructs

Social exclusion, like self-esteem, has been subject of a wealth of research and literature. At the widest level, the topic of social exclusion has become part of the national governmental agenda, with the increasing demand that everyone, regardless of factors such as gender, ethnicity, physical ability or socio-economic status, should be given fair access to the opportunities offered. To this end, the government has implemented initiatives such as the Sure Start programme (DfEE, 1999) which targeted families with pre-school children in 500 economically deprived locations in England and gave them community-based resources (now known as Sure Start Children's Centres), which offer families access to a wide range of childcare opportunities, information, and other services. Initiatives such as this and others (for example schemes to tackle teenage pregnancy, antisocial behaviour and truancy; UK Social Exclusion Unit, 2000a-d, 2001) demonstrate an understanding at a policy-making level of the importance of early intervention in order to reduce chances of exclusion later in life. They also reflect an understanding of the fact that if parents are socially excluded, their children are more likely to also become socially excluded, a cycle which needs to be broken if children are to

develop into active and valuable members of society (Bynner, 2001). More closely related to the field of education, legislation such as the Warnock Report (DfES, 1978), the Disability Discrimination Act (DTI, 1995) and the Special Educational Needs Code of Practice (DfES, 2001) have emphasised the need to ensure that all children are given access to educational opportunities, regardless of their needs.

In an educational context, social exclusion is perhaps best demonstrated at the level of individual pupils or groups of pupils, where some pupils become somehow isolated from or by their peers. Most obviously, the issue of bullying highlights the fact that some pupils, for whatever reason and despite a range of factors put into place to prevent it, become isolated and sometimes actively discriminated against by peers. At this point it is pertinent to clarify some of the terminology surrounding social exclusion in schools.

The term “bullying” is one term used to describe social exclusion within schools (Olweus, 1978; Koenig, 2001, Espelage & Swearer, 2003). Bullying has been described as physical or psychological intimidation that is unprovoked and harmful (e.g. Wheeler, 2004); however Stanley & Arora (1998) state that non-physical social exclusion is better described as “peer rejection”, a phrase also used by Asher & Coie (1990) and Rubin (2002). In some literature, social exclusion is closely aligned to “social aggression”, which refers to both verbal and non-verbal behaviour which *“...hurts others by damaging friendships and social status”* (Underwood, Scott, Galperin, Bjornstad & Sexton, 2004, p1538). Another feature of social aggression is that it *“...concerns close friendships and involves at least three children”* (Underwood *et al*, p1538).

Social exclusion in children arises as a result of socially aggressive behaviours such as excluding a child from an activity they were led to believe they would be able to join in (Munthe, 1989), and ostracism, ganging up on someone or stealing friends

(Warden, Christie & Stevens, 1994). Further examples of socially exclusive behaviours are detailed by Underwood *et al* (2004) as including friendship manipulation, gossip, making faces, nasty gestures and ignoring (e.g. Cairns, Cairns, Neckerman, Ferguson & Gariepy, 1989; Owens, Shute & Slee, 2000; Olweus, 1996; Crick & Grotpeter, 1995). Because much of this socially exclusive behaviour takes place out of the view of adults, the isolation of its victims can often go unnoticed (Barrett & Randall, 2004). For the purposes of this present study, the term ***social exclusion*** will be used throughout to refer to the effects of such behaviours; both on the victim (becoming isolated from peers) and on the perpetrator (being rejected by peers).

2.2.1.2 - The human need to “belong”

A body of theory suggests that being accepted and valued by others is not merely an ideal, but is a basic human need. In fact, Baumeister & Leary (1995) suggest that the need to belong can be considered “...a powerful, fundamental and extremely persuasive human motivation” (p521). This theory has become known as the “belongingness hypothesis”, and links to other psychological theories such as those proposed by Freud (e.g. 1930), Maslow (1968) and Bowlby (e.g. 1969, 1973). For the purposes of this study, the term ***social inclusion*** will be used to refer to the concept of feeling accepted by peers and being able to socialise appropriately with them. It can therefore be considered as an opposite of social exclusion, however a consideration of both social inclusion and social exclusion are important to this study in light of the terminology of the umbrella research question, “*Under what circumstances might targeted academic interventions, social skills, self esteem or anger management groups in schools prevent exclusion?*”.

Literature suggests that feeling attached to others does not just feel good, but also serves a number of purposes. Social control theory (Hirschi, 1969; in Noaks & Noaks, 2009) suggests that the stronger an individual’s bonds are to society, the less likely they are to engage in delinquent behaviours; with the bonds formed

within the school setting being vital in this relationship. Wentzel & Asher (1995) also write that being accepted by peers early in life helps the child to develop social skills, whilst Baumeister & Leary (1995) write that social inclusion is fundamental to emotional and cognitive development. These benefits are in addition to the benefits described by Asher (1990) who states that *“Friends are important sources of companionship and recreation, share advice and valued possessions, serve as trusted confidants and critics, act as loyal allies, and provide stability in times of stress or transition”* (p3).

Given the apparent human need to belong, it follows that being socially excluded by others can be an intensely painful experience, causing a variety of negative emotions such as sadness, confusion and frustration. Some theorists suggest that this “social pain” (Eisenberger & Lieberman, 2004; Eisenberger, Lieberman & Williams, 2003) is actually analogous to physical pain and that it involves the same parts of the brain; specifically the anterior cingulate cortex and periaqueductal brain structures and the opioid and oxytocin neuroendocrine systems (MacDonald & Leary, 2005). It is proposed that social pain is actually key to human survival, with threats to a person’s social connections being processed at a basic level as a threat to safety (MacDonald & Leary, 2005) or a threat to their capacity to satisfy their need to belong (Leary, Tambor, Terdal & Downs, 1995). By focusing attention on negative social experiences, it is argued that social pain helps the individual to learn how to avoid similar situations in the future, and therefore maximise their social inclusion.

2.2.1.3 - Social exclusion and inclusion in childhood

For children, the issues of social inclusion are particularly pertinent. In fact, it has been reported that young children worry about peer relations more than any other issue in their lives (Ladd, 1990). Yet the process of friendship formation and building cohesiveness within groups appears to be maintained, in part, by a process of social exclusion – creating an “out-group” can make the “in-group” more cohesive

(Thienpont & Cliquet, 1999, Gruter & Masters, 1986). In demonstration of this, Paley (1992) found that children believe that play will not be fun if just anyone can join in, which suggests that it is important for children to feel some control over who is part of the group and who is not (Harrist & Bradley, 2003).

As children grow older, peer relationships assume increasing importance (Ellis, Rogoff & Cromer, 1981). Children become more concerned about the nature of social groups, the norms and expectations that determine their structure, and their effective functioning (Killen & Stangor, 2001). As they become adolescents they become ever more socially aware, with the issues of gaining acceptance by peers and avoiding rejection assuming higher priority. As Leets & Sunwolf (2005) describe, adolescents have to learn to navigate a complicated system of social rules, such as how to dress and who to associate with, a process which can be complicated and confusing.

A number of studies have looked at how socially exclusive behaviours develop as children become older. In young children, social aggression tends to be expressed through non-verbal gestures such as hitting, snatching, and pushing, but as children develop verbal skills and become more aware of the negative social consequences of physical aggression, this behaviour lessens and they tend to engage in more indirect forms of aggression instead (Bjorkqvist, 1994). These become more sophisticated with development (Crick, Wellman, Casas, O'Brien, Nelson & Grotpeter, 1999), appearing to peak at the early teenage years (e.g. Talbot, 2002; Bjorkqvist, Lagerspetz & Kaukiainen, 1992). Interestingly, this developmental progression is described by Bigelow & LaGaipa (1980) as being "*perfectly consistent*" with the distinctions made between prelogical, concrete-operational and formal-operational stages described by Piaget (1926, 1932).

Research shows that, unfortunately, some groups of children are less likely to become socially included than others. In terms of becoming excluded from society, research suggests that children growing up in the care system, children with absent parents, and those with criminal records (Robins & Rutter, 1990) are particularly at risk, as are children who have disabilities, especially if they are growing up in poor material circumstances (Bynner, 2001). In terms of being socially excluded at school, it is children who display particular behaviours who are most vulnerable. Research highlights the following behaviours as risk factors: being disruptive, uncooperative or impulsive (e.g. Ledingham & Schwartzman, 1984; Putallaz & Gottman, 1981); and being bossy, demanding, or untrustworthy (e.g. Parker & Asher, 1987). Displaying aggressive behaviour is also a particular risk factor (e.g. Coie & Cillessen, 1993, Coie, Dodge & Coppotelli, 1982; McGuire, 1973), with Bierman (2004) summarising that *"It is simply not fun to play with people who won't share, who don't follow the rules, or who lose their temper when things don't go their way"* (p17). As such behaviours tend to irritate and provoke other children (Egan & Perry, 1998), these may be characterised as "externalising" behaviours.

A range of less overt behaviours and characteristics can also place a child at increased risk of being socially excluded. Such behaviours include: being unfriendly or lacking a sense of humour (Egan & Perry, 1998); crying easily, being physically weak or outwardly anxious (e.g. Hodges, Malone, & Perry, 1995, 1997; Olweus, 1978; Schwartz, Dodge & Coie, 1993); being "different" or having qualities which make the child stand out (e.g. Kistner, Metzler, Gatlin & Risi, 1993); or having a disability or being perceived as unattractive (e.g. Bierman, Smoot & Aumiller, 1987; Hartup, 1983). There are therefore a wide range of factors, both within and out of the child's control, which can affect their social inclusion.

2.2.1.4 - Rejected, neglected, popular and controversial children

Interestingly, sociometric research suggests that different types of behaviours are associated with different types of socially excluded children. Wentzel & Asher

(1995, p754) define these different groups as **rejected** children, who are infrequently named as being a best friend and are actively disliked by their peers; and **neglected** children, who are infrequently nominated as a best friend but are not actively disliked. According to research, rejected children tend to be more aggressive and disruptive (e.g. Coie *et al*, 1982; Coie & Kupersmidt, 1983; Dodge, Coie & Brakke, 1982), whereas neglected children tend to be judged to be more shy and less interactive (Coie *et al*, 1982; Dodge, 1983; Dodge *et al*, 1982). Two other categories of children identified by sociometric research are those who are **controversial**, who are frequently nominated as a best friend but are also actively disliked; and **popular** children, who are frequently nominated as a best friend and are rarely disliked by their peers.

2.2.1.5 - Effects of being socially excluded

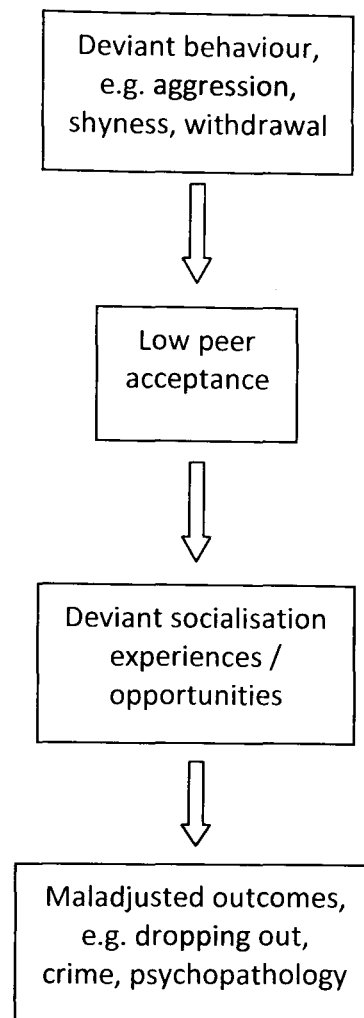
It is easy to see how, for children whose behaviour leads them to be habitually rejected or neglected by peers, opportunities to learn or demonstrate more socially appropriate behaviours become very limited; as when children are excluded by their peers, they are denied access to the very opportunities for positive peer interactions that could support the development of prosocial skills (Ladd & Asher, 1985). As a result, many of these children are left to play alone or with younger and less socially-skilled children (Ladd, 1983), or they may form allegiances with other socially excluded children (Bierman, 2004). While these relationships can offer the child valuable experiences of friendship, such relationships can compound the child's social interaction problems; *"...as low quality social interactions fail to promote social growth"* (Bierman, 2004, p10).

Research also suggests that, in addition to continued social interaction difficulties, socially excluded children are at higher risk of a number of other difficulties. In the short term these can include loneliness and depression (Cole & Carpentieri, 1990) and difficulties engaging in the curriculum (e.g. DeRosier, Kupersmidt & Patterson, 1994; O'Neil, Welsh, Parke, Wang & Strand, 1997, Parker & Asher, 1987). In the

longer term these effects can include early school withdrawal (Parker & Asher, 1987), truancy and involvement with delinquent activities (Frederickson, 1991); and can even extend to the development of mental health problems and/or involvement in criminal activities later in life (Bagwell, Newcomb & Bukowski, 1998; Coie, Terry, Lenox, Lochman & Hyman, 1995; Cowen, Pederson, Babigan, Izzo & Trost, 1973; Kupersmidt & Cowie, 1990; Roff, Sells & Golden, 1972). In their review and analysis of literature on this topic, Parker & Asher (1987) concluded that there was clear support for a link between social exclusion during childhood and later life difficulties, particularly in terms of criminality and dropping out of school. In particular, they highlight the strength of aggressiveness as a predictor of these outcomes.

Of course, as in the case of self-esteem, it is difficult to establish the nature of the relationship between socially undesirable behaviours, social exclusion, and later difficulties. Parker & Asher (1987) propose two possible models of this relationship; a causal model, where social exclusion is seen as a contributory factor to later difficulties, and an incidental model, where social exclusion seen as a by-product rather than a cause of this relationship:

a) Causal model



b) Incidental model

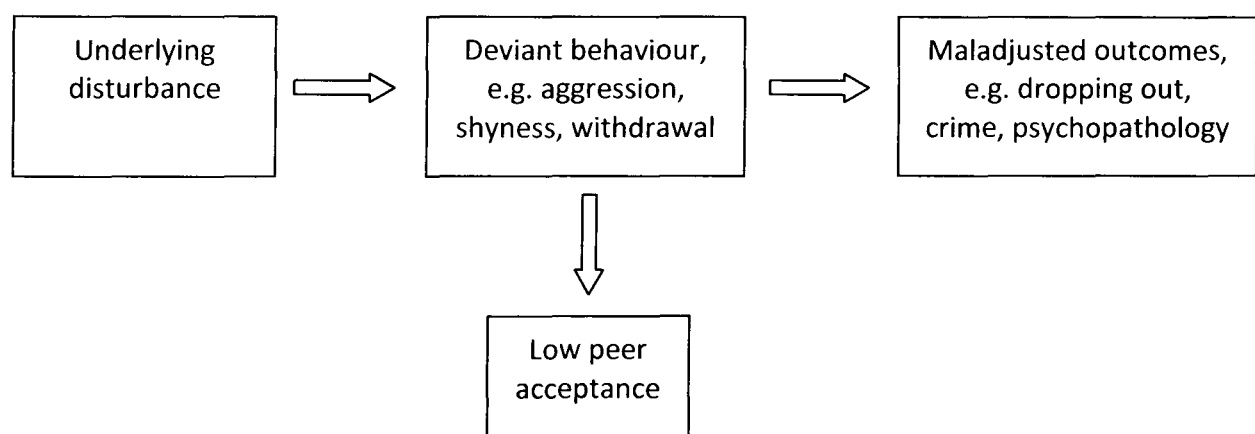


Figure 2: The causal and incidental models proposed by Parker & Asher (1987) to explain the relationship between socially undesirable behaviours, social exclusion and later difficulties

However, although both these models are logical and clear, Parker & Asher acknowledge that they can both be considered “...deficient in terms of the issues they consider and the sophistication with which they reason about both the nature of peer-relationships disturbance and the course and etiology of deviant development” (p379). It is perhaps more realistic to say that the relationship between behaviour, exclusion and later life difficulties should be seen within the context of a set of “*mutually interacting circumstances*” which reinforce and build upon each other, emphasising the person’s deficits and risks (Bynner, 2001, p295).

A more recent model proposed by Bagwell *et al* (1998), in which children’s peer relationships are said to moderate the relationship between risk variables and maladjustment, may provide a more plausible explanation of the link between behaviour, exclusion and later life difficulties. This model implies that “*Positive experiences with peers can provide a degree of resiliency for a child who is at risk of poor outcomes*” (Bagwell *et al*, 1998, p151), which implies that it is important to try and encourage these positive interactions as early as possible (Harrist & Bradley, 2003). One way of doing this is to equip children with a range of skills that will help them to successfully negotiate social situations; such skills include being able to join a group (Corsaro, 1981; Putallaz & Gottman, 1981), maintain conversation and play (Gottman & Parker, 1986), resolve interpersonal conflicts (Shantz, 1987), and deal with name-calling and other forms of provocation (Dodge, 1986).

2.3 Links between self-esteem and social inclusion/social exclusion

The topics of self-esteem, social exclusion and social inclusion are evidently very pertinent at a school and societal level. A number of researchers have investigated the links between self-esteem and social exclusion, with many finding apparent correlations between the two variables (e.g. Hodges & Perry, 1996). However, as in the self-esteem and social exclusion/inclusion literature reviewed above, it is

difficult to determine the direction of causality – so it is unclear whether low self-esteem causes a person to become rejected by their peers, or whether low self-esteem is an effect of being rejected by their peers.

A body of evidence collected over the past twenty years supports the hypothesis that low self-esteem leads to social exclusion. One theory is that even if an individual possesses the necessary social skills to interact effectively with other people, feelings of insecurity arising from their negative self-perception may affect their ability to express pro-social behaviour (e.g. Bandura, 1986; Blunk, Prins, Sergent & Ringrose, 1996; Jupp & Griffiths, 1990), which means they are then more likely to become socially withdrawn or rejected by their peers (e.g. Cavell, 1990; McFarlane *et al* 1995). It has also been suggested that people with low self-esteem appear to expect and accept negative feedback more than do people with high self-regard (Blaine & Crocker, 1993; De La Ronde & Swann, 1993; Tice, 1993) and tend to display more signs of depression, cautiousness and poor self-regulation (Baumeister, 1993; Harter, 1993). These behaviours make them appear less attractive to peers, hence they become excluded.

Offering a second view of how low self-esteem can lead to social exclusion, Egan & Perry (1998) stated that “...because they feel unworthy, children with low self-esteem may hesitate to assert their needs or to defend themselves during conflicts” (p299). In this well-cited study, Egan & Perry investigated whether there was actually any evidence for this, hypothesising that low self-esteem would be associated with a reduced motivation or ability to assert and defend the self effectively during conflicts with peers. Their second hypothesis was that having a high level of self-esteem would protect those children whose behavioural characteristics place them at risk of being socially excluded in this way (for example having poor social skills, physical weakness and manifest anxiety). Egan & Perry collected data from 189 children in third to seventh grade classes, using the self-concept measure developed by Harter (1985) and a self-efficacy scale designed for

the study. Behavioural and risk factors were assessed using a modification of the Peer Nomination Inventory designed by Wiggins & Winder (1961), which added a valuable element of peer-assessment to the study. When measurements were repeated approximately six months later, the authors found evidence to support both of their hypotheses; which led them to conclude that displaying characteristics of low self-esteem does make a child more vulnerable to social exclusion.

On the other hand, it is suggested that low self-esteem may be a consequence of being socially excluded over time. Having conducted a comprehensive meta-analysis of 28 studies examining the links between real world social rejection (as opposed to experimentally-manipulated social rejection) and trait self-esteem, Blackheart, Nelson, Knowles & Baumeister (2009) recently reported that participants who were continually or chronically rejected by others, and those perceiving themselves as rejected by others, reported significantly lower trait self-esteem than non-rejected individuals; leading them to propose that self-esteem eventually suffers as a result of rejection. This conclusion is similar to that drawn by Egan & Perry (1998), where comparisons with control participants also led the authors to argue that their study “...*may be the first to show convincingly that actual maltreatment by significant others leads to impairments in self-regard over time*” (p307).

Therefore, there appears to be support for both hypotheses regarding the direction of the link between self-esteem and social exclusion. Perhaps, rather than trying to establish which is “correct”, it may be more fitting to draw the same conclusions as Egan & Perry (1998) that the links between the two “...*suggests a vicious cycle in which low self-regard and abusive treatment by others are mutually reinforcing*” (p307); or by Boivin Poulin & Vitaro (1994) that low self-esteem as a consequence of social exclusion can cause a negative spiral in which rejection undermines social confidence, which undermines self-esteem, which further undermines social confidence, and so on.

If this theory – which seems plausible – holds true, then it follows that the effects of interventions that aim to enhance either self-esteem or social inclusion should help to break this cycle. Currently, within-school interventions such as Social and Emotional Aspects of Learning (SEAL; DFES, 2005) and Circles of Friends (e.g. Newton & Wilson, 2005) present a range of approaches to help support the development of self-esteem and social inclusion within children and young people. Furthermore, Nurture Groups (e.g. Boxall & Lucas, 2010) offer a more intensive approach to this, providing structured and supportive small-group environments within school where children can develop appropriate social skills and self-esteem. As an applied practitioner with an interest in the growing evidence-base surrounding such interventions, the researcher has an interest in these approaches; however due to her previous experience of using guided imagery to enhance self-esteem, she was keen to pursue this in more detail. In this study, guided imagery was therefore used as the vehicle for intervention; this will be described below.

2.4 Guided imagery and its applications

2.4.1 An explanation of guided imagery

Guided imagery is a person-centred cognitive therapeutic technique described as “*a directed, deliberate daydream that utilizes all senses to create a focused state of relaxation and sense of physical and emotional well-being*” (Tusek, Church & Fazio, 1997a). The process, developed by Assagioli (1980), involves guiding individuals through experiences in the mind in order to access physical, emotional and spiritual dimensions to effect bodily change (Achterberg, 1985). It can be used with adults and children alike, and can be facilitated with few resources on an individual or group basis. These features have made guided imagery an attractive form of intervention in a variety of fields including complementary medicine, psychotherapy and education.

The guided imagery process normally begins with a facilitator taking the participants through some breathing exercises or progressive muscle relaxation,

which helps to relieve any tension they may be feeling (Morone & Greco, 2007). Although relaxation is not an essential component of guided imagery (Post-White, 2002), it has been suggested that it helps to elicit an altered state of awareness and concentration which helps to control thought processes and intensify the image (Leuner, 1977; in Eller, 1999). Once participants are relaxed, the facilitator then moves into delivering the actual guided imagery, which can take one of several forms (described below). Whichever form of guided imagery is used, the facilitator will usually provide stimuli words or sounds that will prompt the participants to generate mental images or reflect on a series of imagined events (Myrick & Myrick, 1993); this provides material for discussion afterwards. The whole relaxation and guided imagery process is often accompanied by gentle background music, which helps the participant to maintain their relaxed state (Roffe, Schmidt & Ernst, 2005).

The main guided imagery can take one of several forms. Van Kuiken (2004) refers to the following types being used: ***pleasant imagery***, where participants are guided to imagine a calm, comfortable place, or images of general well-being and health; ***physiologically focused imagery***, where participants imagine the physiological function of some healing that may be needed, for example imagining the immune system physically fighting infection within the body; and ***mental rehearsal or reframing***, where participants imagining the performance of a task prior to actually performing it, or imagine an event having reinterpreted the emotions connected to it. In addition to these forms of guided imagery, Galyean (1983) identified three types of guided imagery used more specifically in schools: ***guided cognitive imagery***, used to develop thinking skills and consolidate material presented in lessons; ***guided affective imagery***, where imagery is used as a means of helping pupils become more accepting of themselves and others as well as becoming more aware of their capabilities and potential; and ***guided transpersonal imagery***, where the use of imagery helps pupils to go beyond the ordinary physical-emotional way of viewing the world and to explore mystical, psychic and spiritual dimensions.

Facilitators of guided imagery can vary the extent to which they structure the imagery section of a session. On one hand, the facilitator can provide the

participant with a theme, for example “a walk along a beach”, and ask them to describe the images that spontaneously emerge. The facilitator then explores these images and the participant’s emotional response to these, perhaps encouraging them to imagine they are elements within the imagery journey (Hall, Hall, Stradling & Young, 2006). Alternatively, the facilitator can provide a directive narrative structure for the imagery, which allows the participant to explore concepts that may be helpful (Murray-Edwards, 2002), such as encouraging new coping behaviours for managing pain or anxiety (Post-White, 2002). The latter example is commonly known as **scripted guided imagery**, but can also be referred to as structured imagery or guided fantasy (e.g. Chevreau, 1993; Anderson, 1980).

2.4.2 Applications of guided imagery

A literature review by Arbuthnott, Arbuthnott & Rossiter (2001) summarises that “...*empirical evidence that imagery is effective at promoting change covers an impressive range*” (p123). It refers to evidence from the field of health psychology, where the use of imagery has been found to be effective in improving the rate and extent of recovery from surgery or serious illness (Carey & Burish, 1988; Hall, 1984, 1990; Hall & Kvarnes, 1991; Holden-Lund, 1998; Manyande, Berg, Gettins, Stanford, Mazhero, Marks & Salmon, 1995; Sheikh & Kunzendorf, 1984), reducing infectious illness and stress (Baum, Herbman & Cohen, 1995; Hall, 1990; Jasnoski & Kugler, 1987; Olnes, Culbert & Uden, 1989; Schneider, Smith, Minning, Whitcher & Hermanson, 1990; Watson & Marvell, 1992), and affecting physiological outcomes such as the production of white blood cells in patients with cancer (Donaldson, 2000) or the extent to which patients require narcotic medication (Tusek *et al*, 1997a; Tusek, Church, Strong, Grass & Fazio, 1997b). Guided imagery has also appeared to be effective helping patients manage pain (Eller, 1999; Marino, Gwynn & Spanos, 1989; Turk, Meichenbaum & Genest, 1983). In illustration of this, a recent structured review of mind-body interventions by Morone & Greco (2007) found some evidence for the efficacy of guided imagery in conjunction with progressive muscle relaxation in reducing osteoarthritis pain in older adults;

however the authors advise that larger, clinical trials are needed to further validate such claims.

In addition to its applications in the field of health psychology, studies have also investigated the use of guided imagery in psychotherapeutic contexts. For example, Aruthnott *et al* (2001) refer to studies that have shown the use of imagery – either alone or in conjunction with other methods such as music or hypnosis – to be helpful in the treatment of a variety of conditions such as bulimia nervosa (Esplen, Garfinkel, Olmsted, Gallop & Kennedy, 1998), panic attacks (Der & Lewington, 1990), and post-traumatic stress disorder (Kuch, Swinson & Kirby, 1985). Research also suggests that guided imagery can help to effect change in non-clinical populations. A controlled study by Lantz, Buchalter & McBee (1997) found that elderly patients were perceived by nursing home staff to be significantly less agitated following an intervention that included elements of guided imagery and relaxation, and Sklare, Sabella & Petrosko (2003) found that the use of solution-focused guided imagery techniques significantly improved the self-efficacy scores of a group of 44 students and school counsellors. While the methodology of both of these studies can be criticised, for example the six-session intervention used by Lantz *et al* consisted of only two sessions of guided imagery, and the Sklare *et al* study used participants who had interests in counselling techniques so were therefore possibly predisposed to be positive about the use of imagery, both these studies suggest that guided imagery can have a positive impact on participants. Further support for this is presented in the Arbuthnott *et al* (2001) review, which refers to evidence that imagery can also be effective in improving motor skills and the performance of complex tasks (Denis, 1985; Feltz & Landers, 1983; Richardson, 1994; Smith, 1990).

On the basis of this evidence it appears that guided imagery can help to treat a variety of conditions. However, the reported extent of its impact varies between studies. To investigate whether reported effect size (for example those relating to

anxiety, perceived health status and coping skills) and intervention duration are linked, Van Kuiken (2004) performed a meta-analysis of ten guided imagery interventions published in nursing and medical journals between 1996 and 2002, and found evidence for a positive relationship between the two factors. She concluded that there was evidence to support “...possible moderate to strong results at four weeks” (p177), but noted that effect size generally increased over the first five to seven weeks. Interestingly, Van Kuiken also suggested that because one study appeared to be immediately effective, “...weeks of practice may not be needed”. However, in her review Van Kuiken defined intervention length as the time between the beginning of the intervention and the time of outcome measurement, therefore possibly including a period of unaccounted-for “lag time” which could have confounded the results of the studies investigated. Nevertheless, her review supports the assertion that guided imagery interventions can be effective within a relatively short time.

Despite some evidence existing for the positive effects of guided imagery interventions, consideration must also be given to the possibly confounding effect of their relaxation elements, because – as most studies do not report details of this – it is difficult to ascertain the extent to which any positive effects were attributable directly to the guided imagery rather than any other factors. However, in a review of 46 studies of the effects of guided imagery on symptom management, Eller (1999) found five studies that reviewed the effects of guided imagery alone (Jarvinien & Gold, 1981; Eller, 1995; Stephens, 1992; Pickett & Clum, 1982; and Wells, 1989); the results of which suggested that guided imagery “...is different from, or more than, relaxation” (p62). The effects of guided imagery therefore appear to be more far-reaching than simply an exercise in relaxation.

2.4.3 The theory underpinning guided imagery

As discussed above, the aim of guided imagery is to effect change within a person, either at a physical level or at an emotional level. To this end it can be effective in, for example, helping the person to cognitively restructure situations (Beck, 1976),

where they learn to focus on reality-based data rather than their own skewed perceptions of situations, and helping the person to control maladaptive behaviours through the mental rehearsal of relevant images (Meichenbaum, 1978). The studies discussed above appear to show that a range of positive effects could be achieved through the use of guided imagery; however few allude to the psycho-physiological mechanisms that underlie this relationship. Some of the theory beneath the “...bridge between mind and body” (Eller, 1999, p59) that guided imagery creates will now be presented.

Although guided imagery has been used as a healing technique for over a century (Achterberg, 1985), it began to receive “*serious scientific scrutiny*” around the 1960s (Holt, 1964; in Trakhtenberg, 2008, p834). This led to much interest in psychoneuroimmunology (PNI – Ader, 1981), the study of “...*the interrelationship between the central nervous system, behaviour, and the immune system*” (p312). For example, Norris (1988) referred to evidence showing that the biochemicals which affect a person’s moods, affect and perceptions are made not only by the brain but also by the immune system and other systems of the body; claiming that this was evidence of a “*cybernetic feedback loop*” between the central nervous system and other systems. This finding has been supported by more recent literature (e.g. Adler & Hillhouse, 1996; McDaniel, 1996, Miller & Cohen, 2001) that specifically points to “...*a link between psychological states, including stress, and immune system response*” (Donaldson, 2000, p117).

An early explanation for this was described by Green, Green & Walters (1969), who stated that the emotional response that a person has to a stimulus – such as imagery – generates chemical responses in the limbic system, which in turn activate the pituitary gland and prompt physiological responses, which are in turn perceived and responded to (thus completing the cycle). Donaldson (2000) describes this PNI mechanism further in relation to the immune system, synthesising the principle that every thought has a physiological response and the findings that thoughts

about specific bodily activity can apparently activate the appropriate motor neurons that relate to that activity (Jacobsen, 1929; Siegel, 1986) to propose that guided imagery may promote physiological responses that can affect the immune system. PNI is therefore based on evidence that suggests there is a reciprocal relationship between a person's psychological state and the physiological systems within their body; the implication of this being that "mind" can have some influence over "matter".

Moving slightly away from the pure mind-body interaction as described by PNI, Achterberg (1985) described a neuroanatomic model of the link between psychology and physiology. According to this model, the formation of nonverbal images and the processing of emotions occur adjacently in the right hemisphere of the brain, and this association defines the autonomic (or bodily) response that the body has to different emotional stimuli. The left hemisphere, meanwhile, has conscious control of the voluntary nervous system and can therefore step in to mediate the relationship between the emotional stimulus and autonomic response; thus indicating that the conscious mind can affect the unconscious response.

Drawing all these theories together, Brigham (1994) argued that if thought and physiological function are interlinked, then change within this cyclic system should be effected by intervening at any point within it. He postulated that an easy place to intervene would therefore be at the point of perceptions, emotions, cognition, or images – hence the use of techniques such as guided imagery to effect bodily change. The potential applications of PNI, Brigham argued, are exciting and wide-ranging; and would perhaps be better represented by use of the terms "psychoneurobiology" or "biopsychology".

An alternative explanation of the effects of guided imagery has been suggested by Colalillo-Kates (1989), who argued that guided imagery could help to address the issue of “displaced hemispheric orientation”, where the two hemispheres of the brain do not interact as efficiently as they should. According to Colalillo-Kates, learning environments tend to place emphasis on cognitive learning strategies at the expense of more affective learning styles, meaning that the left hemisphere (which processes language, formulae and other “logical” information – Kruse & Render, 1986) becomes dominant over the right hemisphere (which processes visuo-spatial information, images and pictures, and may be in contact with the unconscious mind and intuition – Kruse & Render, 1986). This imbalance, she argued, can affect the efficiency with which the individual can learn. While learning environments have evolved since this paper was published (for example with the increased awareness of “learning styles” in schools and the introduction of programmes such as Brain Gym within classrooms, e.g. Smith & Shenton, 1996) it appears that Colalillo-Kates sees guided imagery as a means of re-establishing contact and interaction between the two hemispheres; thus allowing for more efficient learning.

It therefore appears that guided imagery has a range of useful applications, in terms of enhancing the quality of the interaction between the conscious and the unconscious, and in helping to synthesise different areas of brain functioning. In addition to this, as a cognitive therapeutic technique it is an unusual and enjoyable way to explore issues surrounding concepts such as self-esteem and social inclusion. *In the context of this study, it should therefore be reasonable to hypothesise that if the guided imagery intervention does enhance self-esteem, then improvements in social inclusion should also be seen.*

2.5 Systematic literature review

The principal aims of the present study were to examine the extent to which a guided imagery intervention was associated with changes in both the self-esteem and social inclusion of children in Key Stage 2. To identify existing research into these two areas, the researcher carried out a systematic search of literature in the following manner.

2.5.1 Systematic search 1

2.5.1.1 - Search terms used

In order to find literature relating to the first research question,

- *To what extent can guided imagery enhance the self-esteem of children in Key Stage 2?*

an initial search was conducted to gain an indication of the breadth of literature available. This involved entering the terms “guided imagery”, “imagery” and “self esteem” into the ERIC and PsychINFO databases, combined with the search command AND. No limits were set, meaning that results could include books, journal articles and dissertation abstracts.

Given that only 18 unique results were of potential interest despite no limits being placed on date of publication or age range, it was clear that the search terms would need to be broadened. From initial reading about guided imagery and self-esteem, a list of synonyms and further possible search terms was therefore compiled, which consisted of the following terms (shown in Table 1). At this stage the age range was widened to “children” rather than “children in Key Stage 2”.

Guided imagery	Self-esteem	Children
<i>guided imagery</i>	<i>self-esteem</i>	<i>children</i>
<i>scripted guided</i>	<i>self-concept</i>	<i>child</i>
<i>imagery scripted</i>	<i>self-confidence</i>	<i>adolescent</i>
<i>imagery</i>	<i>self-regard</i>	<i>adolescents</i>
<i>guided fantasy</i>		<i>teenager</i>
<i>scripted fantasy</i>		<i>teenagers</i>
<i>fantasy adventure</i>		<i>student</i>
<i>guided journey</i>		<i>pupil</i>
<i>scripted journey</i>		<i>young person</i>
<i>fantasy journey</i>		<i>young people</i>
<i>guided experience</i>		<i>school</i>
<i>scripted experience</i>		

Table 1: List of synonyms and possible alternative search terms used in first systematic literature search

From here the researcher decided to conduct an exhaustive search on the PsychINFO database, using the “Advanced Ovid Search” option. The same search would later be repeated using the ERIC database, to check for previously unidentified literature.

2.5.1.2 - Search strategy

Exact phrases were entered into PsychINFO within quotation marks (e.g. “self esteem” would return articles containing this exact phrase, and not simply articles containing *self* or *esteem*), and words could be truncated using a colon (i.e. a search for the word *imag?* would return articles containing variations of this word, such as *imagery*, *imagination*, and *images*). Words and phrases were combined either with the command OR, which would return articles that contained any of the specified search terms; or with the command AND, which meant that articles had to contain

all of the specified search terms. The search was restricted to literature published in the last 25 years, a decision which recognised the popularity of guided imagery in the 1980s. Table 2 details the exact strategy used:

Search	Search terms	Restrictions	No. of results
<i>"To what extent can <u>guided imagery</u> enhance the self-esteem of children in Key Stage 2?"</i>			
A	<i>guide: OR script: OR structure:</i>	1984 – current	198410
B	<i>imag: OR daydream: OR journ: OR adventure: OR fantas: OR experience:</i>	1984 – current	750649
C	Literature containing search terms specified in Searches A AND B		87690
<i>"To what extent can guided imagery enhance the <u>self-esteem</u> of children in Key Stage 2?"</i>			
D	<i>"self esteem" OR "self concept" OR "confidence" OR "self-regard"</i>	1984 – current	66564
<i>"To what extent can guided imagery enhance the self-esteem of <u>children</u> in Key Stage 2?"</i>			
E	<i>child: OR pupil: OR student: OR adolescen: OR school:</i>	1984 – current	603116
F	<i>young AND (person OR people)</i>	1984 – current	13408
G	Literature containing search terms specified in Searches E OR F		607306
<i>"To what extent can <u>guided imagery</u> enhance the <u>self-esteem</u> of <u>children</u> in Key Stage 2?"</i>			
H	Combine results of searches C, D AND G		1701

Table 2: Systematic search strategy used in first literature search

At this point, because over 1700 pieces of potentially useful literature had been returned, the researcher felt it necessary to apply some inclusion and exclusion criteria. This would help in selecting only the most relevant literature to analyse in more depth.

2.5.1.3 - Inclusion and exclusion criteria

According to Petticrew & Roberts (2006), certain types of study design have higher internal validity than others when investigating the effectiveness of interventions. Ideally, systematic reviews and meta-analyses should primarily be used as a source of evidence, closely followed by randomised control trials with definitive and non-definitive results. Other study designs, such as case studies and opinion pieces, have a higher susceptibility to bias so are not as valid as sources of evidence. For this reason, it was decided that studies consisting of systematic reviews, meta-analyses and randomised control trials (ideally with definitive results) would be of primary interest. The 1701 results of Search H were therefore further restricted by imposing several “additional limits” on the PsychINFO search page, which restricted results to those of a suitable design. Restrictions were also applied to the source of the article (for example, articles that had been published in journals relating to criminology and law were excluded). Full details of the way in which this search was restricted can be seen in Appendix 1.

The application of these additional limits narrowed the results down to just 104 articles, and a decision was made to examine each of these in more detail. In order to do this, a judgement was made as to whether the title and abstract of each article appeared to meet the following conditions:

- Relating to the use of guided imagery to enhance self-esteem (e.g. literature describing the process of guided imagery, or explaining how it could be used in different settings were excluded)

- Presenting measurable outcomes of the success of a guided imagery intervention, preferably from an experiment where participants had been randomly assigned to an experimental or treatment group
- Reporting results of a “pure” guided imagery intervention (e.g. interventions that included elements of guided imagery alongside other techniques such as relaxation or social skills training were excluded)
- Reporting research conducted in an educational setting (e.g. studies conducted in hospitals or care homes for the elderly were excluded)
- Full text publicly available (i.e. studies that had not been published, or whose sole source was *Dissertation Abstracts International*, were excluded)

2.5.1.4 - Critical review of identified studies

This trawl through abstracts and whole articles revealed that just three published pieces of literature were considered to meet *all* the inclusion criteria, although some provided more general information about guided imagery which has contributed to the literature review above. A repeat of the same search strategy on ERIC found no new articles of interest. These three articles will now be reviewed in chronological order, with summary tables outlining the most relevant details of each study.

Kruse & Render (1986)

Purpose of study	<i>"...to provide data regarding the existence of a relationship between the use of a fantasy journey and students' self-concepts" (p20)</i>
Participants	49 third and fourth-grade students, randomly allocated to a treatment group (n = 25) or control group (n = 24).
Nature of intervention	A pre-recorded piece of guided imagery, "The Relaxing Cloud" (Hendricks & Roberts, 1977, p59), was played to students in the treatment group. Children in the control group were withdrawn to listen to a story with their class teachers.
Frequency/duration of intervention	The intervention consisted of a single fantasy journey, lasting 13 minutes.
Independent variables	Treatment (guided imagery) versus control (no guided imagery)
Dependent variable	Children's perceptions of themselves, measured after the intervention using the Piers-Harris Self-Concept Scale for Children (Piers & Harris, 1969).
Results	<ul style="list-style-type: none">• A two-tailed t-test showed that the difference between the mean score of the treatment and control groups approached statistical significance (p = .06).
Conclusions	<ul style="list-style-type: none">• The authors conclude that <i>"...a fantasy journey may aid in improving student self-concept"</i> (p22), but state that the study would need to be replicated to allow more definitive conclusions to be drawn

Table 3: Details of study by Kruse & Render (1986)

A number of methodological issues are raised when reviewing this study. Firstly, it is very unlikely that a single session of guided imagery could lead to significant differences in self-esteem between participants in the treatment and control

groups; and, if such an effect had been demonstrated, it is also likely to have been transient. In addition to this, it is not clear exactly what sort of introduction the participants in the treatment group were given before listening to “The Relaxing Cloud”, apart from Kruse & Render writing that “...as the fantasy journey used is fairly extensive, a short introduction to it was necessary [so as?] not to overextend the subjects’ attention span” (p20). On the next page the authors then state that “No instructions preceded the fantasy journey” (p21). Together, these statements suggest that participants in the treatment group actually received very little in the way of instructions or introduction before listening to the fantasy journey, which indicates that participants could have been unclear both on what to expect and what would be expected of them.

Another shortcoming of this study is that by using a post-test only design, the authors cannot comment on the extent to which the guided imagery actually helped to *improve* the participants’ self-concept; they can simply observe that following the intervention, the scores of the participants who received the intervention were better (although not significantly so) than those of the participants in the control group. A pre-intervention assessment of self-concept would therefore have enhanced this study.

In their conclusions, Kruse & Render suggest that future studies into the relationship between fantasy journey and self-concept use a larger sample size. Whilst it is true that the generalisability of a study normally increases with the size of the sample used (e.g. Robson, 2002), the sample in this study – 49 participants – could have been used to good effect, had the study been better designed. Given the methodological shortcomings of this study, it seems that Kruse & Render’s findings cannot be treated as much more than anecdotal.

Silvestri, Dantonio & Eason (1994)

Purpose of study	<i>"...to investigate the effects of a self-development program, and relaxation/imagery training on the self-esteem of intact classes of economically at-risk fourth-grade students" (p30)</i>
Participants	90 African-American fourth-grade students (two classes each from three public Elementary schools located in a "low socio-economic urban area"), 42 males and 48 females.
Nature of intervention	Developing Understanding of Self and Others – Revised (DUSO-R; Dinkmeyer & Dinkmeyer, 1982). Makes use of listening, discussion and drama to help children focus on feelings, communication and problem-solving. Activities include stories, guided fantasies and role-play. Intervention delivered by class teacher. Relaxation/imagery training involved the teacher describing scenes designed to have a tranquil effect on the participants. This was accompanied by quiet instrumental music
Frequency/duration of intervention	Both interventions consisted of 2 X 30 minute sessions per week. Interventions lasted for 16 weeks in total (32 sessions)
Independent variables	Experimental group 1 – DUSO-R, School A (n = 30) Experimental group 2 – Relaxation/imagery training, School B (n = 30) Control group – No treatment, School C (n = 30)
Dependent variable	Global self-worth, scholastic competence, social acceptance, athletic competence, physical appearance and behavioural conduct; all measured before and after intervention using the Perceived Competence Scale for Children (Harter, 1982)
Results	Final data analysis was conducted on all 90 participants.

	<p>Results indicated that:</p> <ul style="list-style-type: none">• The DUSO-R group scored higher than control group on total post-test scores of self-esteem• Relaxation training had an effect on physical appearance and athletic competence, but not the other four domains of self-esteem
Conclusions	<ul style="list-style-type: none">• Both treatment programmes were effective for different aspects of self-esteem, but the DUSO-R programme was more effective for this age group at enhancing feelings of global self-worth

Table 4: Details of study by Silverstri et al (1994)

Silverstri *et al*'s study provides a little evidence for the efficacy of a guided imagery intervention in increasing the self-esteem of participants, although this effect was only seen in the areas of physical appearance and athletic competence. Given that the nature of the guided imagery intervention is not specified in detail, it is difficult to determine why this may be. If, for example, the “...scenes that were designed to have a tranquil effect on the students” (p33) included elements that directly related to physical appearance and athletic competency but not the other competencies, this effect could be clearly understood. However, in the absence of such information it is impossible to say why this effect was found. A more detailed explanation of the nature of the guided imagery intervention would have enhanced this piece of literature, and would also aid other researchers in replicating the study.

A further point to note is that no real details are given of the guided imagery intervention; in fact on reading this study it feels as though the guided imagery intervention was an “add on” to the investigation of the DUSO-R intervention. For example, although the DUSO-R programme is published and a detailed account of

the programme's aims and methods is given, it is not clear enough exactly what the guided imagery intervention entailed. It is not stated whether the teacher followed a script or not, how the themes were decided, or whether she began the imagery by talking the participants through a relaxation exercise. No details are also given of any follow up work that may have accompanied the imagery, whereas the DUSO-R programme clearly uses a range of activities to contextualise the content of each session. From this point of view, it is difficult therefore evaluate the effectiveness of the guided imagery intervention.

Silvestri *et al*'s inclusion of a no-treatment control group does enhance the internal validity of this study, as it supports the suggestion that the increases in self-esteem seen in the two treatment groups are due to the interventions (rather than, for example, maturation effects). To further substantiate this claim it would have been useful to split each class into three groups so that there were 10 control participants, 10 participants receiving the DUSO-R intervention and 10 participants receiving guided imagery in each school. This would reduce the risk of results being threatened by the effects of factors such as school ethos, other curriculum activity, and differences in teaching style. Modifications such as this would also allow more substantial conclusions to be drawn about the effect of both interventions in enhancing self-esteem.

Omizo, Omizo & Kitaoko (1998)

Purpose of study	<i>"...to investigate the efficacy of guided affective and cognitive imagery in enhancing self-esteem among Hawaiian children" (p54)</i>
Participants	60 children from the fourth, fifth and sixth grades of one school. 34 girls and 26 boys. Children were at least 25% Hawaiian and ranged from 8 to 12 years (M = 10 years 1 month). Participants were randomly assigned to either the experimental condition (which consisted of three groups of ten children) or the control condition
Nature of intervention	Scripted guided affective and cognitive imagery sessions, delivered by three counsellors who had been trained and monitored by the senior author of the study. Each counsellor facilitated only one experimental group. The guided imagery sessions were designed to provide opportunities to increase the children's awareness of themselves and others. They also aimed to enhance self-esteem, and develop life skills such as problem-solving, coping, and stress management. The authors detail how <i>"Guided affective imagery was used to create for each child an awareness and acceptance of his or her own strengths and areas for improvement, and guided cognitive imagery was used to develop skills and accelerate mastery of cognitive material"</i> (p56). Activities made reference to the children's feelings and as many of the senses as possible
Frequency/duration of intervention	Ten weekly sessions, each lasting approximately 45 minutes
Independent variables	Experimental versus control conditions
Dependent variable	General self-esteem, social/peer-related self-esteem, academic/school-related self-esteem, and parents'/home-

	related self-esteem; all measured before and after the intervention using the Culture Free Self Esteem Inventory (Battle, 1981), which consisted of 60 questions (participants answered either “yes or “no” to each)
Results	Final data analysis was conducted on 19 experimental children and 22 controls. Results indicated: <ul style="list-style-type: none">• Significant differences between the General Self-esteem and Academic/School-relates Self-esteem scores of children in the experimental and control conditions ($p<0.01$), but no significant differences found on other two self-esteem measures
Conclusions	<ul style="list-style-type: none">• <i>“The results partially support the use of guided affective and cognitive imagery to enhance self-esteem among Hawaiian children...It seems that children in the experimental group felt better about themselves compared with the children who did not participate in the intervention strategy” (p60)</i>

Table 5: Details of study by Omizo et al (1998)

Omizo et al set the context for this study by observing that when Hawaiian children join schools in the United States, they often feel tensions between the strong group-based values of their native culture and the more individualistic values of U.S culture. As a result they often suffer conflicting value systems, feelings of inadequacy, feelings of helplessness and difficulties adapting to a new language; which are exacerbated (unintentionally) by an education system that gives “mainstream American children” (p53) an inherent advantage. Consequently the self-esteem of Hawaiian children can suffer, with possible long-term effects as described earlier in this literature review. This study aimed to establish whether a guided imagery intervention would be an effective way of helping to address this.

This study is concise but well-explained. Details of each guided imagery session are given, to the extent that the reader has a clear idea of the content and nature of each session. This would help future researchers in replicating the study; however the scripts for each session would have to be obtained from the authors in order to do this reliably. Having three different adults facilitate the experimental groups also helps to validate the finding that it was the intervention, rather than anything to do with the facilitator, that encouraged the enhancement of the participants' self-esteem.

In their final data analysis, Omizo *et al* omitted the results of any experimental participants who missed three or more of the guided imagery sessions. Although this reduced the size of the final sample by more than a third, the advantage of this is that results represent only participants who received all, or nearly all, of the ten sessions. This helps to substantiate the claims that were consequently made about the effectiveness of the intervention in enhancing self-esteem, because the final sample represents participants who received its full benefits.

There are, however, some limitations of this study. Firstly, the authors acknowledge that these results may not generalise to other Hawaiian children, or children in other minority groups. It would therefore be interesting to replicate this study to see whether this is true. Omizo *et al* also point out that the effects seen may have been due to “...the attention and reinforcement given by the facilitators” (p61) rather than the content of the intervention. This phenomenon, known as the Hawthorne Effect (Roethlisberger & Dickson, 1941), is a factor always worth considering when evaluating such studies, but in this case could have been controlled for by having a second control condition in which the participants took part in a different adult-led intervention.

Woodward (2007, unpublished)

One final study that fits all the requirements of this systematic review is a small study conducted by the researcher in her previous employment as an Assistant EP. Although unpublished, details of the experiment are obviously easily accessible to her.

<i>Purpose of study</i>	To investigate the efficacy of a guided imagery intervention in raising the self-esteem of children in Year 5
<i>Participants</i>	17 pupils in Year 5 (9 girls, 8 boys) at three mainstream primary schools in a large city in the East Midlands. Two groups consisted of five participants, the other consisted of seven
<i>Nature of intervention</i>	Scripted guided imagery, designed to enhance children's self-esteem through helping them recognise and value their positive attributes, develop skills of conflict resolution, and encourage them to work towards personal goals. Each session also incorporated related activities to encourage group discussion and personal reflection. Sessions were designed by the researcher with advice from Deborah Plummer, who had written and published similar interventions for children (e.g. Plummer, 1998) and with supervision by a Senior EP. The intervention was delivered in two schools by the researcher, and in the third school by another assistant EP who had been trained in the delivery of the sessions.
<i>Frequency/duration of intervention</i>	Five weekly sessions of between 45 minutes and an hour.
<i>Independent variables</i>	There was no control group in this study – a pre-post comparison of self-esteem was conducted
<i>Dependent variable</i>	Global self-esteem, academic self-esteem, body self-esteem and social self-esteem, measure before and after the intervention using the Five-Scale Test of Self-Esteem

	<p>for Children (Pope, McHale & Craighead, 1988).</p> <p>Participants respond to 60 statements with either “agree”, “disagree” or “don’t know”. A second assessment of global self-esteem, the Lawseq Pupil Questionnaire – Primary Version (Lawrence, 1982; in which pupils answer 16 questions with “yes”, “no” or “don’t know”) was also made before and after the intervention.</p>
Results	<p>One-tailed paired sample t-tests were performed and indicated:</p> <ul style="list-style-type: none"> • Global self-esteem scores typically increased from 60% to 70% as measured by the Lawseq questionnaire; this difference was statistically significant ($p<.05$) • Self-esteem scores typically increased from 63% to 67% as assessed by the Five-Scale test, however this was not statistically significant • Statistically significant improvements in overall self-esteem, which was taken as an average of participants’ scores on both tests ($p<.05$)
Conclusions	<ul style="list-style-type: none"> • This study provides a little evidence to support the efficacy of guided imagery as an intervention for raising the self-esteem of children in Year 5, however replications using a larger sample and a control group, with modifications to the intervention, would aid more robust conclusions to be drawn

Table 6: Details of study by Woodward (2007, unpublished)

Although this study indicates that guided imagery can enhance self-esteem, the improvements reported in this study were only large enough to be significant when using one of the measures. This demonstrates an advantage of using more than one measure of any given variable – the results gained when using one measure may

not be replicated when using a different measure, even though both claim to measure the same thing. The use of two measures of self-esteem was therefore a positive attribute of this study.

It is possible that, because participants answered both self-esteem questionnaires verbally during an interview with the researcher before the intervention, some participants' results were artificially high at pre-testing, because they wanted to appear more confident than they actually were. By post-testing, when many of the participants were familiar with the researcher, the participants' results may have actually been a more valid assessment true feelings. If this was the case then the difference between their pre- and post-intervention self-esteem scores may have appeared smaller than it actually was, meaning that the actual effects of the guided imagery would not have been fully represented in the statistics. In this respect, the method of assessing self-esteem may have adversely affected the outcome of the study. Future replications of the study would need to considerer alternative ways of delivering these questionnaires.

One further point to note about the assessment of self-esteem is that participants were firstly identified by staff within the schools, who had been asked to identify approximately ten participants who they thought may have low self-esteem and could therefore benefit from the intervention. The self-esteem of these participants was then assessed, and participants were selected from these groups via a combination of their test scores and discussion with staff. In this respect a few participants were included in the study despite having relatively high self-esteem scores at pre-testing, if staff felt this was over-representative of their true self-esteem. Again, this could have meant that pre-post intervention changes in self-esteem may have appeared smaller than they actually were. Although an element of staff input can be useful in identifying participants who may benefit from the intervention more than numerical scores could show, this does entail a huge degree

of subjectivity into the selection procedure, which poses a threat to the validity of the results.

Some other methodological issues also stand out when examining this study. One major flaw was that there was no control group, which means that it is impossible to say whether the improvements seen were a result of the intervention or whether they were due to the participants maturing over the intervention period (although as the intervention period was only five weeks, this seems somewhat unlikely). The fact that the intervention only consisted of five sessions, one of which was an “introduction” session, may have also been significant, as it may have been unrealistic to expect a sizeable effect in such a short period.

2.5.2 Systematic search 2

2.5.2.1 - Search terms and strategy used

To find literature relating to the second research question,

- ***To what extent can guided imagery reduce the social exclusion of children in Key Stage 2?***

the search strategy detailed in Table 2 was repeated using synonyms of social exclusion instead of self-esteem. These synonyms were: (peer: OR social? OR friend?) AND (reject? OR isolat: OR bull? OR victim? OR lonel? OR exclu? OR inclu?). This search returned 17 results on both PsychINFO and ERIC, however when equivalent exclusion criteria were applied no studies were deemed appropriate for further analysis. It therefore appears that no research has been published (within the search limits and exclusion criteria described above) that specifically investigates the extent to which guided imagery can reduce social exclusion.

However, one of the articles reviewed in relation to self-esteem (Omizo *et al*, 1998) did refer to effects of guided imagery on social behaviour. Omizo *et al* reported that when teachers of participants in the study were informally asked about the behaviour of the participants in the experimental group, the teachers reported that the participants who had received guided imagery showed more appropriate social behaviours and were getting along better with their classmates. Furthermore, these effects were still reported when the teachers were interviewed again approximately two months later. The authors concluded that this provided “*some indication*” of long-term effects of the intervention (p61). Unfortunately, however, this evidence is only anecdotal; there are no details of the questions asked or the way in which this information was collected (beside Omizo *et al* stating that teachers were asked “*informally*”, p61).

It is also possible that the positive teacher reports were affected by the following two factors. Knowing the participants had received the intervention, the teachers could have been particularly sensitive to small changes in the children’s behaviour that they would have otherwise not have noticed (i.e. they were particularly more sensitive to signs that the children appeared more self-confident); or they could have been reporting positive effects to please the researchers. These two factors are further reasons why it would have been interesting for Omizo *et al* to have included details of their method of data collection. In conclusion, it therefore appears that Omizo *et al* provide some evidence to support the effects that guided imagery can have on social exclusion; however the anecdotal nature of this evidence means it should be treated with caution.

2.6 Conclusions and rationale for this study

2.6.1 Conclusions

The topics of self-esteem and social exclusion have been subject to a huge amount of research and theoretical debate over recent decades. From the literature reviewed above, the following main conclusions can be drawn:

- Self-esteem is generally accepted to reflect a combination of an individual's feelings of self-worth and self-efficacy. "Global" or "trait" self-esteem tends to remain stable over time and reflects the sum of a person's self-esteem across a number of different domains (for example, social self-esteem or academic self-esteem).
- An individual's self-esteem can be measured and placed on a scale ranging from low to high; however self-esteem measures normally rely upon self-report, which entails a number of methodological pitfalls. People can also be assessed as having narcissistically high self-esteem, which relates to an over-inflated sense of superiority over others.
- There is very little evidence that global self-esteem affects academic achievement, but people with higher self-esteem do appear to be more resistant in times of setback or adversity. High self-esteem is more closely linked to aggression than low self-esteem is, however aggression tends to be linked to narcissistically high, rather than healthy high, self-esteem. It is unclear whether self-esteem is a cause or an effect of these outcomes.
- High self-esteem can generally be linked to higher levels of initiative, which can be used to positive or negative effect.
- Social exclusion can be seen at different levels, such as that of a society or peer group.
- It appears that being socially included is a basic human need and is associated with a number of positive outcomes. Children become more concerned with being included as they move towards and into adolescence.
- Research suggests that certain behaviours or characteristics are often associated with social exclusion. These include aggression, withdrawal and

being untrustworthy; and can lead to a child being rejected or neglected by their peers.

- Once a child has been socially excluded, they miss out on opportunities to learn and develop more socially acceptable behaviours. This contributes to a negative spiral, which is difficult to break.
- As in the case of self-esteem, it is unclear whether these characteristics are a cause or an effect of social exclusion. Evidence has been found to support both directions of causality.
- Self esteem and social inclusion appear to be positively correlated, although the direction of causality can be argued both ways. It has been suggested that rather than one underlying the other, low self-esteem and social exclusion are actually intertwined and reinforce each other.

2.6.2 Rationale for this study

Research from the fields of complementary medicine, therapy and education suggest that guided imagery – a person-centred cognitive therapeutic technique – can have a number of positive effects. However, a systematic search of two databases indicates that very little research has been conducted into the extent to which guided imagery interventions can specifically enhance self-esteem or social inclusion. Overall, the few studies that have attempted to do so show some evidence that guided imagery may be an effective intervention; effects that may have been larger or more reliable had the studies been better-designed. Only one study appeared to have investigated the links between guided imagery and social inclusion; however these results were only anecdotal.

On the basis of this evidence, it is felt that there is a gap in the research for a well-designed study into the effect that a guided imagery intervention can have on enhancing children's self-esteem and social inclusion. The intervention designed and used by the researcher in her previous employment will therefore be re-examined, using a larger sample and a waiting list control group. Should support be found for the hypotheses that guided imagery can enhance self-esteem and social

inclusion, this intervention could be introduced by Educational Psychologists as a novel and enjoyable way of effecting these outcomes in schools.

Chapter 3

Methodology

This chapter will begin with a discussion of the meaning of “research” and of the different epistemologies that exist in research in the social sciences. A variety of methodological issues pertinent to “real world” research will also be considered, including different types of research design and factors that can threaten the validity of results. The design of this study will then be clearly explained, followed by a detailed account of how the study was set up and carried out.

3.1 Approaches and issues in research methodology

3.1.1 Differentiating between research and evaluation

In their recent discussion of the emphasis placed on “scientific based research” in the American education system, Feuer Towne & Shavelson (2002) note that “*After years of envy for federal support received by their compatriots in medical, technological, agricultural, and physical research, educational researchers can now rejoice: Research is in.*” (p4). The same rhetoric can also be applied to the UK, with the increasing demand for the authors of different programmes and interventions to show that their approach “works” or that their chosen method of programme delivery is underpinned by evidence. There is therefore a growing need to investigate the claims made by authors and to objectively examine the truth behind them. One way this can be done is to subject their claims to rigorous scientific research, with the goal of this being “*...to demonstrate that any changes in a*

dependent variable are the direct result of implementing a specified intervention" (Gersten, Fuchs, Compton, Coyne, Greenwood & Innocenti, 2005; p157).

But what exactly is meant by "research", and how is this different to "evaluation"? One explanation of this distinction is offered by Mertens (2010), who describes research as *"...a process of systematic inquiry that is designed to collect, analyse, interpret and use data"* that is *"...typically associated with generating new knowledge that can be transferred to other settings"* (p2). She contrasts this with evaluation, which she describes as being *"...typically associated with the need for information in decision making in a specific setting"* (p2). In making this distinction, Mertens therefore appears to place research at quite a macro level, with its purpose being to establish a deeper understanding of educational or psychological phenomenon; and places evaluation at more of a micro-level, with the effectiveness of individual programmes or interventions being analysed in view of their specific contexts.

Perhaps it is more the case that, rather than research and evaluation being two separate entities, the process of the former is actually inherent in the act of the latter, with the products of evaluation making a contribution to what we already understand as a result of research. However this debate is resolved, it is clear that the products of research and evaluation holds a considerable power to enhance or change the way that people understand and perceive a phenomenon, and therefore has the potential to change how we conceptualise the world around us.

3.1.2 Approaches to research in the social sciences

At a more abstract level, the purpose of research can be framed within a number of different philosophical standpoints, or paradigms. For example, the current study is most appropriately placed within the ***postpositivist paradigm***, which asserts that the aim of research is to enhance the level of confidence with which claims about

educational or psychological phenomena can be made. This is achieved by making objective observations of the phenomena (Gall, Gall & Borg, 2007), then considering whether the claims made about these observations satisfy two conditions – firstly that they are realistic representations of the particular situation, and secondly that they would also hold true in other situations. Within this paradigm, the researcher remains objective and unbiased during the course of their study, and normally collects and analyses measures variables in a quantifiable way to lend support to (or otherwise) a pre-determined hypothesis or research question. The post-positivist paradigm is therefore closely associated with traditional quantitative approaches to research design, as exhibited by this study, as well as approaches that analyse qualitative data *as* quantitative data, such as content analysis (Coolican, 2009).

An alternative paradigm that research can be placed within is the ***constructivist paradigm***, in which researchers seek to present a representation of differing views on phenomena, acknowledging that many socially constructed “realities” may exist. The constructivist researcher will interact with participants and will regard each participant as an individual who has their own “story”, or version of reality, to tell. Data is normally qualitative, with the researcher seeking to “...*capture holistic pictures using words*” (Mertens, 2010, p6). To this end, data is collected via methods such as interviews and observations, and the research normally reports details about the backgrounds of participants and the contexts in which they were studied (Mertens, 2010). In contrast to the post-positivist paradigm, research within the constructivist paradigm aims to investigate different perceptions of a phenomenon rather than gathering evidence to support (or otherwise) a hypothesis about it. In contrast to the post-positivist paradigm, the constructivist paradigm is therefore more closely associated with qualitative approaches to research design.

In discussing the contrast between these two paradigms, Bryman (1988; in Robson, 2002) suggests that there are more similarities between these approaches than

would initially appear, and that the two can complement each other well. Both approaches provide very different ways of understanding phenomena, but there are clearly advantages and disadvantages to both. For example, results of a quantitative study may indicate a statistical relationship between two variables, but a qualitative study may shed light on the nature of this (Hammersley, 2000). Research that uses elements of both approaches – or a mixed method approach – can be placed within a third paradigm, **pragmatism**, which asserts that the researcher may use whichever philosophical or methodological approaches that best answer the research question. To this end, pragmatists incorporate features of both quantitative and qualitative methodologies in their design, data collection and analysis (Teddlie & Tashokkori, 2009); with Mertens (2010) suggesting that the aim of using a combination of both approaches may be “...to seek a common understanding through triangulating data from multiple methods, or to use multiple lenses simultaneously to achieve alternative perspectives that are not reduced to a single understanding” (p264).

While some research is best suited to a particular paradigm and approach to data collection, the mixed methods approach advocated by pragmatists can therefore be an attractive option to social scientists.

3.1.3 Research in “real world” contexts

As previously stated, the present study fits within the postpositivist paradigm, as it seeks to help answer two research questions through the gathering and analysis of both quantitative and qualitative data. In designing and carrying out the present study, the researcher strove to demonstrate what Robson (2002) refers to as a “*scientific attitude*” (p18), which refers to the need to be *systematic, sceptical* and *ethical* throughout. According to Robson, these qualities are important when conducting research in “the real world” (i.e. contexts where whatever we are interested in occurs) as, unlike in laboratory contexts where conditions can be

tightly controlled and the researcher can specifically isolate and change variables of interest, real world contexts such as schools present a multitude of factors that can affect experimental integrity (Robson, 2002).

Therefore it is important that researchers give careful consideration to how they plan and conduct their studies of real world contexts. Manstead & Semin (1988) stress that the choice of strategies and tactics employed should absolutely be informed by the type of research questions that the research study is attempting to address – a point that Robson (2002) describes as “...*obvious but often neglected*” (p80). In the present study, the nature of the research questions guided the nature of the methodology, as described below.

3.1.4 Research questions addressed by this study

The design of the present study was specified prior to data being collected, and was not anticipated to evolve. Both quantitative and qualitative data was collected and analysed with the aim of addressing the following two research questions:

- **To what extent can guided imagery enhance the self-esteem of children in Key Stage 2?**
- **To what extent can guided imagery increase the social inclusion of children in Key Stage 2?**

The subsidiary question,

- **To what extent are the self-esteem and social inclusion of children in Key Stage 2 associated?**

was also addressed using quantitative data analysis, as a way of illustrating the relationship between self-esteem and social inclusion.

The present study can therefore be described as a piece of *fixed design* research, which employed mixed methods to identify associations between an independent variable (with two levels: presence or absence of guided imagery intervention) and two dependent variables (assessed level of self-esteem and social inclusion), with the aim of identifying patterns and processes which could be generalised to the larger population. The fixed design approach adopted in the present study is in contrast to the approach offered by *flexible design* research, where research design evolves and emerges throughout the process of data collection and analysis. Some of the issues surrounding experimental design will now be considered.

3.1.5 Randomised Controlled Trials

When planning a piece of experimental research such as the present study, the researcher will be keen to be as confident as possible that any observable change in the dependent variable is attributable to the independent variable and not to any other unintended factors (sometimes known as *extraneous* or *lurking variables*, *alternative explanations*, or *rival hypotheses*; Mertens, 2010). One way of doing this is to allocate participants randomly to the different conditions, which means the study becomes a “true” experiment, or randomised controlled trial (RCT).

For many researchers, the RCT is considered to be the “gold standard” of educational and psychological research, as – because it compares situations involving the presence or absence of a presumed cause of an effect – it can highlight possible “...*systematic relations between actions and outcomes*” (Feuer *et al*, 2002, p8). If the independent variable has really had no effect, then any observable differences between the different conditions can be attributed to random variation among participants and other non-systematic variables (Coolican, 2009), therefore supporting the null hypothesis that the independent variable is ineffective.

However, as attractive as the RCT is as a tool in experimental research, it is not immune to criticism. Robson (2002) details some of these criticisms as the facts that politicians and other decision-makers are rarely influenced solely by the outcomes of RCTs or other research; that quantitative, experimental approaches are often seen as inappropriate ways of reaching a real understanding of social phenomena; and the fact that RCTs, along with other types of social experiment, hardly ever yield unequivocal results. Furthermore, Maxwell (2004) points out that although RCTs may highlight associations between variables, they do not offer any understanding of the processes that cause this relationship to exist in the first place. In an attempt to reconcile the strengths and limitations of RCTs, Robson argues that in real world contexts it may be preferable to consider a ***combined strategy design***, where an initial flexible design stage allows for exploratory work to be done, and a secondary fixed-design stage – perhaps using an RCT – allows for “...a highly focused experiment or other fixed design study” (Robson, 2002, p121) to take place.

In the present study, participants were randomly allocated to the intervention group (who took part in the guided imagery intervention in the autumn term) and a waiting list control group (who would take part in the intervention after the autumn term), therefore making it an RCT. In addition to this, the dependent variables, self-esteem and social inclusion, were measured before and after the intervention period, meaning that a ***pre-test post-test control group design*** was used. This enabled the researcher to compare the results of participants in the experimental and control groups, with the aim of evaluating the efficacy of the guided imagery intervention and therefore answering the research questions.

Alternative RCT designs would have included ***post-test only control group design***, where no pre-intervention measurements are taken, and ***single-factor multiple-treatment design*** where, rather than there being simply an intervention group and a control group, further intervention groups are run so the researcher can directly

and fairly compare the effects of each. A final type of RCT, **factorial design**, involves the researcher investigating the effects of two or more concurrent variables simultaneously, with each variable having two or more levels. The effects of and interactions between each variable are analysed, which allows the researcher to “...ask pointed questions about the conditions under which variables exert their effects” (Kazdin, 2003, p168). These RCT designs were not appropriate to the design of this study.

3.1.6 Quasi-experimental design

Theoretically, the random allocation of participants to different conditions “...is the best method for estimating effects” of an independent variable (Feuer *et al*, 2002, p8). However, in reality, random allocation is not always feasible or ethical; for example Kazdin (2003) points out that “In clinical, counselling, and educational research, investigators are often unable to shuffle clients or students to meet the demands of a true experiment but must work within administrative, bureaucratic, and occasionally even anti-research constraints.” (p169). In cases such as this, the researcher may conduct a **quasi-experiment** (Cook & Campbell, 1979), where an experimental approach is used but participants are not randomly allocated to different conditions. Instead, the researcher studies the effect of intervention on intact groups such as whole class groups or participants of different ages (thus creating “non-equivalent groups”). According to Cook & Campbell (1979; in Coolican, 2009), even if an experiment lacks the random allocation of participants and/or the researcher is unable to retain full control over the independent variable, a robust study can still be presented providing that the limitations of the control condition are acknowledged and addressed as far as possible.

3.1.7 Issues of internal and external validity

In addition to the issues described above, when designing any piece of research the researcher will want to be as sure as possible that observed effects are a direct result of the independent variable and nothing else. In the present study, the

researcher wanted to be as sure as possible that any changes in self-esteem or social inclusion were solely attributable to the guided imagery intervention. This highlights the issue of **internal validity** in experimental design; the extent to which a study can plausibly attribute any results, changes or group differences to the intervention in question (Kazdin, 2003).

The real world researcher must therefore try to control – as far as possible – for the confounding effects of extraneous variables, so that any conclusions about the efficacy of the treatment can be drawn with a higher level of confidence. Extraneous variables may include factors such as **maturation**, where observed changes are more likely attributed to the participants' growing older during the course of the study; **experimental treatment diffusion**, where participants in one group inadvertently receive information or aspects of the treatment intended only for a second group; **differential selection**, where observed differences between the experimental and control groups are more attributable to group differences rather than the intervention; and **experimental mortality**, where participants who feel they are making little progress withdraw from the study, therefore skewing the results. These "threats" to internal validity are taken from a list of eight threats identified by Campbell & Stanley (1963), later extended to twelve by Cook & Campbell (1979; all twelve factors detailed in Robson, 2002).

In addition to considering threats to internal validity, the researcher must also be aware of factors that can threaten the **external validity** of their study. This term refers to "*...the extent to which the results of an experiment can be generalised from the set of experimental conditions created by the researcher to other environmental conditions*" (Bracht & Glass, 1968; in Mertens, 2010, p129), and is sometimes referred to as generalisability. In the present study, it was important to ascertain whether any relationship between guided imagery, self-esteem and social inclusion could also be expected to be observed if the intervention was repeated in a different context.

Bracht & Glass (1968) identify a set of ten factors that can potentially threaten external validity. These include ***pre-test sensitisation***, where the nature of the pre-test materials sensitises the participants to the content of the intervention; ***experimenter effect***, where the efficacy of the intervention reflects characteristics of the person who delivers it and the relationship they have with participants, rather than the intervention itself; ***the Hawthorne Effect*** (Roethlisberger & Dickson, 1941), where the idea of receiving “special attention” or of being selected to take part in a study can be enough motivation for participants to facilitate change, irrespective of the intervention received; and ***multiple-treatment interference***, where participants receive more than one intervention, thus making it impossible to ascertain which one/s have facilitated any observed changes.

Two further threats to external validity are of particular relevance to the present study, which took place in three schools over an intervention period of five weekly hour-long sessions. The first of these is ***treatment fidelity***, which refers to the extent to which the treatment is conducted appropriately and as intended (Kazdin, 2003). The researcher can help control this by providing detailed training and supervision for facilitators and designing a schedule for monitoring the integrity of the delivery, for example by using observations and checklists which can be replicated across more than one setting. The second additional threat is that of the ***strength of the experimental treatment***, which refers to the length or intensity of the treatment (Mertens, 2010). Mertens points out that sometimes, the intervention is simply not substantial enough to effect real change in participants’ learning, attitudes, self-concepts or personalities.

In summary, the protection of internal and external validity is an important issue for the researcher to consider when designing studies for real world settings. Without taking measures to reduce the risks posed by the threats introduced above, there is a risk that any conclusions drawn from the study cannot be stated with confidence – with the consequence that the study can therefore add little of value to our

understanding of the phenomenon in question. This is clearly a situation that the researcher will want to avoid. In designing the present study, the researcher therefore strove to design as well-controlled a study as possible, whilst acknowledging that the context she worked in was unpredictable and ever-changing.

3.1.8 Engaging stakeholders in real world research studies

Aside from the author of a study, there are likely to be a number of other “stakeholders” who have an interest in its existence and outcomes. In an evaluative study such as this, stakeholders may include local and national government, the people responsible for delivering the intervention in question, the people participating in the intervention, and the body responsible for the interests of the people participating in the intervention (Robson, 2002). Naturally, the interests of these different groups will be very different, with different stakeholders having different priorities, so Lehtonen (2006) argues that ideally, stakeholders should be actively involved in a process of dialogue to ensure that their ideas, opinions and ideas are represented.

In the present study, the following stakeholders were identified:

- **National D&R Programme board** – Having commissioned Trainee EPs to research into four different issues of national priority, the D&R Programme board would have an interest in the integrity of the study and in the implications of its results for future research and practice
- **University** – As the body responsible for providing the researcher with her professional training, the University of Nottingham would have an interest in ensuring that the researcher conducted an ethically sound study that was of doctoral standard.
- **The author’s previous Educational Psychology Service (EPS)** – As the guided imagery intervention was still being offered to schools by this EPS, the

Senior EP who retained responsibility for this would have an interest in this second evaluation of the materials.

- **Education Authority** – As the body employing the researcher as a Trainee EP, the education authority would have an interest in ensuring that the researcher conducted an ethically sound study and that Headteachers were satisfied with the way the study was carried out.
- **Headteachers** – Having agreed for their pupils to participate in the study, Headteachers would have an interest in the assessed outcomes for children. They would also be concerned with the practicalities of running of the intervention and about the outcomes for their pupils.
- **Group facilitators** – Group facilitators would have an interest in the practicalities of running the intervention, and would also be concerned about the outcomes for pupils.
- **Parents of participants** – Like the Headteachers, parents would have an interest in the effects of the intervention on their children and of any impact it may have on their education.
- **Participants** – Although they will not be aware of the aims of the study, participants would be actively engaged in the intervention and would have an interest in its content
- **Author** – As the person responsible for designing the study and placing it within the context of existing research, the researcher had interests in ensuring it was ethically sound, in ensuring that its findings were reliable and valid, ensuring that it ran smoothly and in ensuring that it was of doctoral standard.

Features of the ethics of the study and in ensuring it was of doctoral standard were non-negotiable. However, more fluid aspects of the study (such as the practicalities of running the programme in schools) were discussed and agreed with Headteachers and Special Educational Needs Coordinators (SENCOs), to ensure that they were fully supportive of the intervention. Where possible, allowances were

made to accommodate the wishes of stakeholders but without compromising the integrity of the study.

3.1.9 Design of the present study

3.1.9.1 - Design

Participants in each school were randomly assigned to either experimental or control groups, with quantitative data being collected before and after the intervention period. This study can therefore be considered an *RCT, with a pre-test post-test control group design*.

For the first two research questions, the independent and dependent variables were:

Research question	Independent variable	Dependent variable
To what extent can guided imagery enhance the self-esteem of children in Key Stage 2?	Guided imagery (two levels: intervention and control)	Self-esteem
To what extent can guided imagery increase the social inclusion of children in Key Stage 2?		Social inclusion

Table 7: Independent and dependent variables for each of the two main research questions

For the subsidiary research question, “To what extent are the self-esteem and social inclusion of children in Key Stage 2 associated?”, the two variables were self-esteem and social inclusion.

3.1.9.2 - Analysis of quantitative data:

To establish answers to the research questions, descriptive and statistical analysis was conducted on the quantitative data collected. In the case of the first two questions, this took the form of t-tests to assess whether significant differences existed over time between the self-esteem and social inclusion of participants who received the guided imagery intervention and those who did not. Effect sizes were then calculated to show the relative size of the effect of the intervention on each variable, to allow comparisons to be made (Wright, 2003). In the case of the third research question, correlation coefficients were calculated to show the extent of the relationship between self-esteem and social inclusion and how statistically significant this was. Specific quantitative analysis methods will be discussed in more detail in Chapter 4.

3.1.9.3 - Analysis of qualitative data:

Group facilitators and participants in the experimental condition completed a short written questionnaire at the end of the intervention, in which they were asked to state how they felt the guided imagery intervention had helped them. This provided a level of qualitative data to the study. Content analysis was applied to this data, with the purpose of establishing whether there were any common themes to the effects that participants reported. Specific qualitative analysis methods will be discussed in more detail in Chapter 4.

3.2 Procedure

3.2.1 Quantitative measurements

Participants were selected for inclusion within the study on the basis of their scores on the Lawrence Self-Esteem Questionnaire, Primary Version (Lawseq; Lawrence, 1982; see Appendix 2). Measurements were also taken of their level of social inclusion, using the Social Inclusion Survey (SIS; Frederickson & Graham, 1999; see Appendix 3). Five behavioural were measured using the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997; see Appendix 4). The rationale and structure of each of these instruments will now be outlined.

The **Lawseq** consisted of sixteen questions, to which the child answered “yes”, “no” or “don’t know/in the middle” to questions such as “*Do you think that other children often say nasty things about you?*” and “*Are there lots of things about yourself you would like to change?*”. As such it provided an assessment of global self-esteem; the researcher felt that this would provide a good indication of the extent to which the intervention encouraged participants to view themselves as likeable and competent. Respondents could score a maximum of 24 points, with standardisation suggesting that a score of 19 is average (Lawrence, 1987).

In contrast to other global measurements of self-esteem, it was felt that the Lawseq’s use of a three-point scale was preferable to a two-point “yes” and “no” scale (for example as used in the B/S-Steem; Maines & Robinson, 1988), as it would be more sensitive to small changes in self-esteem over the intervention period. The Lawseq also had the advantage of having been standardised on an English population and in being specifically designed for use with primary age children (for details, see Lawrence, 1981 and 1983). As authors of other studies have commented, the Lawseq questionnaire is also straightforward to administer and theoretically sound (Davies & Brember, 1999).

As discussed in the literature review, self-esteem is a notoriously difficult attribute to assess. Consequently, it is difficult to determine the construct validity (the extent to which the measure assesses the domain, trait, or characteristic of interest; Cronenbach & Meehl, 1955, in Kazdin, 2003) of the Lawseq, however Hart (1985) administered it to 128 junior age children and found that scores on the Lawseq correlated highly ($r = .73$, $p < .001$) with scores on the Coopersmith Self Esteem Inventory (Coopersmith, 1967) and were reasonably stable over a four month period ($r = .64$). This, in addition to reasons outlined above and the fact that the Lawseq offered participants a three-point choice of answer rather than a two-point choice made the Lawseq the test of choice in the present study. A single measure of self-esteem was used because the researcher felt that the addition of further assessments, asking similar questions, may have caused those participants with low self-esteem to “dwell” on a negative appraisal of themselves.

Social inclusion was assessed using the *SIS*, which established the extent to which each experimental and control child was accepted by their peers. The SIS consisted of two questionnaires, designed to establish how much each child liked to work and play with every other child in their class. Respondents ticked a smiling, straight or sad face to indicate their feelings towards each of their classmates, and from this, each child could be classed as “popular”, “average” or “rejected”. The SIS was therefore a form of forced choice preference record (Frederickson & Cline, 2002), and had a high level of face validity because it would be obvious to the children what it was measuring (Coolican, 2009). It was chosen in preference to techniques such as asking children who they *perceived* to be “popular” or “unpopular” (e.g. Luthar & McMahon, 1996; Rodkin, Farmer, Pearl & Van Acker, 2000) or using teacher estimates of social acceptance, because it was felt that the SIS would give a more valid and reliable representation of each child’s sociometric status.

For the purposes of statistical analysis, the researcher weighted each child’s SIS score, with each smiling face scoring 1 point, each straight face scoring 0 points and

each sad face scoring -1 point (hence a child receiving 11 smiling faces, 3 straight faces and 14 sad faces would score -3). This weighted raw score was introduced because, according to the scoring guidance for the SIS, children's raw scores simply equated to the categorical descriptors "popular", "average" or "rejected". Converting raw scores into weighted scores would provide interval data, thus enabling statistical analysis to be performed more easily than if the categorical descriptors were applied.

The researcher also asked the facilitators of the guided imagery intervention in each school to complete the teacher's version of the **SDQ** for each child in the experimental and control groups. The SDQ consisted of 25 statements, which respondents completed by ticking one of three boxes to indicate the degree to which they feel the statement applied to the child. This provided information on five psychological attributes – emotional symptoms, conduct problems, peer relationship problems, hyperactivity/inattention, and pro-social behaviour – although only two scores, Peer Problems and Prosocial Behaviour, were considered directly relevant to the research questions in this study.

The SDQ was used because it would allow the results of this study to contribute to the National D&R Collaborative Research Project. Based upon the widely-used Rutter questionnaires (Rutter, 1967; Rutter, Tizard & Whitmore, 1970), the SDQ also had the advantages of being standardised on a British population, being straightforward for facilitators to complete, and of providing further information on the children's ability to form and maintain positive relationships with peers, which would complement the information gained using the SIS. In addition to these features, the SDQ had also been shown to have established reliability and validity (Goodman & Scott, 1999; Goodman, 1999, 2001).

3.2.2 Qualitative measurements

At the end of the intervention, group facilitators and participants were asked to complete short self-completion questionnaires to assess the impact that they felt the intervention had made (copies of these questionnaires can be found in Appendices 5 and 6). Both versions of the questionnaire consisted of the same four questions, reworded appropriately to suit participants and facilitators. Two of the questions were closed fixed-choice questions, asking respondents to indicate which sessions (if any) had been the most enjoyable and helpful to the participants. The third question, which was of most interest, was open ended and asked respondents to state how (if at all) they felt the intervention had been helpful. The final question used a Likert scale for respondents to quantify the extent to which they felt the intervention had been helpful, but this was not considered in data analysis as it did not directly relate to either of the research questions.

3.2.3 Information about the participants

3.2.3.1 – Information about the schools

In the spring term of 2009, the researcher asked the Headteachers of three of her “link” schools whether they would agree to their schools to take part in the study. She outlined the content of the intervention and the structure of the research procedure, and explained the implications of their participation in terms of resources, staffing, and time commitment. All three Headteachers were keen for their schools to take part, and nominated their SENCOs as the people the researcher should liaise with.

All three schools were located in an urban district of northern England, with School A being one-form entry and Schools B and C being two-form entry. Recent OFSTED reports described the schools as having the following characteristics:

School A	<i>"This smaller than average school serves an area of some social and economic deprivation. Boys outnumber girls by almost three to two. A rapidly rising number of pupils, now almost a quarter of the school population, are of a south-east Asian background and speak English as an additional language. Several pupils from eastern Europe are at the early stages of learning English." (OFSTED report, 2007; available online)</i>
School B	<i>"This is a very large primary school. Almost all children are of Asian backgrounds. Almost all pupils are learning English as an additional language. The local area is extremely socio-economically deprived." (OFSTED report, 2006; available online)</i>
School C	<i>"This large primary school serves a disadvantaged area approximately two miles from the centre of X. Almost four out of five pupils are from minority ethnic heritages, predominantly Pakistani. A high proportion of pupils are at an early stage of learning to speak English. The proportion of pupils with learning difficulties and/or disabilities, including those with a statement of special educational need, is broadly average. The number of pupils who enter or leave the school part way through their primary education is higher than normal." (OFSTED report, 2008; available online)</i>

Table 8: Characteristics of each school, as described in OFSTED reports

3.2.3.2 – Pre-intervention assessment and participant selection

In the summer term of 2009, the SENCOs of Schools B and C were asked to identify which Year 3 class and which Year 4 class would be “screened” for selection of participants to take part in the study the following academic year (as School A was one-form entry there was no need to make this decision). The SENCOs made this decision according to anticipated timetable commitments, class involvement in other interventions, and staffing levels. As whole class groups were selected for

screening, the researcher felt that they were likely to be representative of the whole school population.

In the summer term of 2009, 149 children in the identified Years 3 and 4 classes in each school completed the Lawseq during a screening session facilitated by the researcher. The purpose of this was to establish who would be considered for inclusion within the study in the autumn term (when they would be in Years 4 and 5). Prior to this screening session, parents of each child had been sent a letter, written by the researcher, and authorised by her supervisor and the Headteachers of each school, which explained the nature of the intervention and the screening instruments and gave them the option to withhold consent to their child taking part in the screening session (see Appendix 7) This was done in the form of an “opt out” reply slip.

During this screening session the researcher also administered the SIS, which formed a second pre-intervention measure of how socially included each child was. Both the Lawseq and the SIS were delivered on a whole-class basis, with each child having their own copies of the instruments to complete (see Appendices 2 and 3). The researcher was careful to follow the published administrative instructions for each measure, using a PowerPoint presentation (see Appendix 8 for electronic copy) to reinforce main points of administration and the importance of confidentiality. The teachers and support staff in each class remained in the classrooms during these screening sessions and helped any children who needed support to complete the questionnaires.

Prior to the screening session the researcher asked the SENCO in each school to consider whether there were any children who were very new to English or had very significant special educational needs, who may find it difficult to meet the language, cognitive and social demands of the screening instruments and the

consequent guided imagery sessions. The decision as to which children fell into this category was made by the class teacher and SENCO, and resulted in a small number of children being withdrawn from the screening session.

After the screening session the researcher scored each child's Lawseq assessment, and the twelve children in each class who gained the lowest scores were selected as potential participants. In some classes, more than twelve children were selected because the child who was twelfth "up" the list when scores were ranked may have shared his score with the thirteenth, fourteenth or even fifteenth child. This process generated a list of 81 suitable children, providing some protection against the effects of any children "dropping out" before the intervention began the following academic year. It was hoped that there would be between five and seven children in each intervention and control group.

Informed parental permission was then sought from the parents of each of the 81 potential participants. This was done in the form of another letter, written by the researcher, and authorised by her supervisor and the Headteachers of each school (see Appendix 9) which reminded parents about the nature of the intervention and how it would be delivered. The letter asked parents who were happy for their child to take part to indicate their consent by signing and returning an "opt in" reply slip.

Once informed consent had been sought from the parents of each selected child, across the schools there was a total sample of 74 children. Within each year group these children were then randomly assigned to either the experimental or control group, by firstly placing the children's surnames in alphabetical order (making separate lists of girls and boys to ensure an even gender balance between groups) then allocating children alternately to either condition.

Table 9 shows the distribution of children in each class between the experimental and control groups:

School	Year group	Experimental n(boys, girls)	Control n(boys, girls)	Total
A	3	6 (2, 4)	6 (2, 4)	12 (4, 8)
	4	6 (3, 3)	5 (3, 2)	11 (6, 5)
B	3	7 (4, 3)	6 (3, 3)	13 (7, 6)
	4	7 (3, 4)	6 (2, 4)	13 (5, 8)
C	3	6 (2, 4)	6 (3, 3)	12 (5, 7)
	4	7 (3, 4)	6 (3, 3)	13 (6, 7)
Total		39 (17, 22)	35 (16, 19)	

Table 9: *Distribution of children in each Year 3 and 4 class between the experimental and control groups*

Once informed consent had been obtained from the parents of each of these participants, facilitators completed the SDQ about each child and returned these to the facilitator.

3.2.3.3 - Facilitators and the facilitator trainer

In the summer term of 2009, the Headteacher of each school identified adults who could facilitate the guided imagery intervention with the Years 4 and 5 children the following academic year. Five facilitators were identified – the SENCO in School A, two learning mentors in Schools B, and two teaching assistants in School C. All facilitators were female members of staff who were familiar to the children.

In the summer term of 2009, the researcher trained the facilitators in delivering the guided imagery intervention (explained below), and provided ongoing support the following term when facilitators ran the guided imagery sessions with the intervention groups. In the spring term of 2010, when the intervention had ceased and post-intervention data had been collected, the researcher provided ongoing support to the facilitators as they delivered the intervention to control group children.

3.2.4 Information about the intervention

3.2.4.1 - *Materials and intervention*

Intervention took the form of five sessions of guided imagery and associated introductory and follow-up activities. The intervention had been devised and delivered by the researcher during her work as an Assistant EP in a different EPS, under the supervision of two Senior EPs in that service and with guidance from Deborah Plummer, author of several published GI resources including *“Using Interactive Imagework with Children - Walking on the Magic Mountain”* (Plummer, 1998). A full copy of the materials used in this in this study can be found electronically in Appendix 10.

The aims of the intervention were to enhance the self-esteem of participants, by using a guided imagery process to enable them to explore different aspects of self-esteem. The intervention therefore used a person-centred cognitive therapeutic approach as described by Tusek, Church & Fazio (1997a) and, because it was aimed at children with low self-esteem with the hypothesis that increased self-esteem would lead to a higher level of social inclusion (as discussed in Chapter 2), it was an example of a targeted prevention programme.

Briefly, each session contained the following material:

Session 1	<p><i>Using our imaginations</i></p> <p><i>After a game where participants introduced themselves, group rules were established. Participants then explored the concepts of imagination and relaxation, and experienced using guided imagery to imagine being a cat. Participants shared their thoughts and feelings with the rest of the group.</i></p>
Session 2	<p><i>What makes me a special person?</i></p> <p><i>Using the idea of “famous people” as a starting point, participants considered what it is that makes people special. They then used guided imagery to imagine being at a ceremony where different people in their lives gave them messages telling them why they were special.</i></p>
Session 3	<p><i>Being happy with myself!</i></p> <p><i>In this session, participants explored the idea that no-one is perfect and everyone has things about themselves they would like to change, but that we have to learn to accept ourselves as we are. Using guided imagery, participants imagined meeting a monster who said hurtful things to them; however they were able to “burst” the speech bubbles that contained the hurtful messages, and watch the monster get smaller and smaller until it disappeared.</i></p>
Session 4	<p><i>Being a good friend to others!</i></p> <p><i>Participants started by considering what qualities make a good friend or a bad friend, and then used guided imagery to be a “Friendship Fixer” – an invisible being who could freeze time and offer advice to participants in the playground who were experiencing a problem with others.</i></p>
Session 5	<p><i>Being the best person I can be</i></p> <p><i>In this final session, participants used guided imagery to imagine that everything in their life was going really well and that they were the best person version of themselves that they could be. They then considered some small things they could do to try and make this achievable.</i></p>

Table 10: Outline of content of each guided imagery session

Each session was designed to last between 45 and 60 minutes, to be delivered by trained facilitators within the school setting. Every session followed the same structure:

- Welcome/recap of previous session (or, in Session 1, an overview of the programme)
- Warm-up activity related to the theme of the current session
- Introduction to the current session and discussion around its theme
- ***Guided imagery:*** relaxation, experience, normalisation
- Group discussion about the imagery experience and sharing of experiences/thoughts
- Follow-up activity
- Goodbyes

This structure provided some predictability to each session, which it was hoped would help minimise any anxiety that participants may have felt about taking part in the intervention. This principle also applied to the guided imagery section of each session, which always began with the facilitator talking the participants through the same gentle breathing exercise to encourage them to become physically and emotionally relaxed, then leading them through the main part of the guided imagery section (the “experience”), which varied from session to session depending on the theme. Following the experience section, the facilitator talked through the normalisation procedure, which encouraged participants to become gradually more aware of the sounds and sensations around them in the room, with the aim of bringing them back to “normal” and getting them ready to engage in the follow up activities.

Apart from some basic equipment that would normally be found within schools (e.g. a CD player, flipchart, coloured pencils), very little equipment was required for each session. The researcher provided facilitators with a “facilitator’s pack” containing all the resources they would need for each session (for example the CD

of relaxing music, and famous people cards for Session 2) and gave clear instructions for any additional equipment that would be required (for example some items that were imperfect but still fulfilled their purpose for Session 3).

The follow-up activity in each session was recorded by each child in an accompanying workbook (see Appendix 11) and required either a written or drawn response. Although these activities helped to consolidate the content of each session, it was felt that the real value of the intervention would come from the discussion activities and the way in which the children processed the session content afterwards.

Facilitators were also provided with copies of the feedback questionnaires, both for themselves and for participants. These were to be completed at the end of the final session.

3.2.5 Information about implementation and delivery

3.2.5.1 - Piloting

The intervention had been successfully piloted in three inner-city schools by the researcher in her previous employment (see Chapter 2 for details of this), in a large urban district of the Midlands. Like the schools described in the present study, each pilot school had a significant proportion of pupils from minority ethnic groups or who spoke English as an additional language.

Informal feedback from the facilitators of the pilot study and the measured outcomes (namely that self-esteem as measured by the Lawseq typically increased significantly; $p < .05$) suggested that participants were able to access the materials effectively and had found the activities easy to engage with. However, some minor

alterations were made to the materials in response to feedback from the facilitators and participants.

The most significant of these was to change the theme of Session 5 from *“My life in two year’s time”* to *“Being the best person I can be”*. The content of this session remained largely the same in that it was still very solution-focused, but placed the imagined scenario (that everything in their life was going very well, and identifying how they could carry this forward) two months in the future rather than two years, as facilitators of the pilot project had felt that, for children of 9 or 10 years of age, it was very difficult to visualise life this far ahead. A time frame of a couple of months was considered to be easier to visualise as it would still be within the same academic year, but would preserve the main themes of the session.

3.2.5.2 - Training and support resources

As previously mentioned, once facilitators had been identified by the Headteacher of each school, the researcher ran a training session in the first half of the summer term. The purpose of this was to introduce the facilitators to the rationale and structure of the research project, familiarise them with the structure and content of the intervention materials, and inform them of when different elements of the research would take place (e.g. consent letters being given to parents, the pre-intervention screening session, and selection of children to take part). The training session took place in School C and was attended by all five facilitators.

During the training session the researcher explained all of the above information with the aid of a handout (see Appendix 12 for electronic copy), which was given to each facilitator along with their pack of resources. In this training session the researcher also talked through the content of each intervention session, and finished by delivering the guided imagery section of Session 3 to the facilitators. This gave the facilitators the experience of “receiving” guided imagery and also

meant that they could see and hear the desired style of delivery being modelled by the researcher.

Throughout the training session the researcher stressed how important it was that the facilitators “followed the script” of each session. To aid this, attention was drawn to the way the session plans were printed, with explanations in black type, scripted parts in blue, and key questions in pink. Facilitators were able to ask questions throughout the training session and were enthusiastic about the prospect of delivering the intervention in the autumn term.

3.2.5.3 - Timeline and delivery schedule

Following the training session, the researcher liaised with the SENCOs and facilitators over the course of the summer term to organise the screening sessions. Lawseq questionnaires and SISs were scored by the researcher over the summer holidays, and the lists of the 74 experimental and control children were presented to the SENCOs and facilitators in the first week of the autumn term, during a meeting organised at each school to ensure that it was still convenient to run the intervention. Once informed consent had been gained and lists of experimental and control children amended accordingly, facilitators began to run the intervention with the experimental groups as soon as was convenient.

It was anticipated that facilitators would deliver the intervention to the Year 4 experimental groups in the first half of the autumn term, and to the Year 5 experimental groups in the second half (children in the waiting list control groups were to receive the guided imagery intervention later in the academic year). However, a number of issues beyond the control of the researcher and facilitators meant that interventions actually ran as illustrated below:

School	Year	Autumn 1	Autumn 2	Comments
A	4			Timetabling issues – facilitator unable to deliver Y4 group in second half of term
	5	✓		(Delivery as planned)
B	4		✓	Building work in school during first half of term, both facilitators delivered intervention in second half of term
	5		✓	
C	4	✓		(Delivery as planned)
	5			Y5 facilitator absent for whole term, Y4 facilitator unable to deliver intervention to both groups

Table 11: Final schedule for the delivery of the intervention

The researcher maintained face-to-face and telephone contact with facilitators throughout the intervention period to ensure the intervention was running successfully and to organise post-testing sessions as appropriate.

3.2.5.4 Post-intervention assessment

In the final week of the autumn term, when all children in the intervention groups had received the intervention, the researcher visited each school again to collect post-intervention data. As in the screening session, this involved the administering of the Lawseq and SIS on a whole-class basis, using the same PowerPoint presentation as before to emphasise key points. As the researcher was unfamiliar with the children in each class, she was blind to which children had been in the experimental or control groups.

This data collection process meant that children who had not been part of either the intervention or control group completed the Lawseq for a second time. As Lawseq data from these children was not relevant to the study, their responses were destroyed afterwards. This data collection process also meant that all children rated (and were rated by) their peers on the SIS, when only data on the intervention and control group children was relevant to the study. Although this was not ideal, the researcher felt that asking whole classes of children only to rate the children who were in the experimental and control groups could have caused the intervention and control group children to feel “singled out”, which would not have been ethically desirable.

Lawseq, SIS and SDQ questionnaires and feedback questionnaires were scored by the researcher over the Christmas holiday, with results being prepared for analysis over the following term.

3.2.5.4 - Treatment fidelity

To help ensure treatment fidelity – a desirable but often neglected feature of school-based behavioural intervention studies (Gresham, Gansle, Noell & Cohen & Rosenbaum, 1993) – a number of precautions were taken by the researcher. The first was to emphasise to facilitators the importance of “following the script” of the session plans during the training session, with an explanation given as to why this was important. During her regular telephone contact with facilitators, the researcher asked them whether they were managing to do so, which also served as a reminder of its importance. This purpose of emphasising this point was to help ensure that the content of each guided imagery sessions was consistent across facilitators.

The second precaution was for the researcher to model the delivery of the guided imagery to the facilitators, by delivering the guided imagery section of the third session to facilitators during the training session. The purpose of this was to help ensure that the content was delivered consistently across facilitators.

The final measure taken was the researcher observing one of the intervention sessions taking place, using a checklist of treatment components and recording whether the main aspects of the intervention were evident (as recommended by Gersten *et al*, 2005). To do this, the researcher observed one of the learning mentors from School B delivering Session 3 to the Year 5 intervention group in the second half of the autumn term, using a pre-prepared observation schedule. This comprised scoring the facilitator out of three to reflect how faithfully they delivered each section of the session plan (with each section corresponding to a key question, explanation or three-sentence section of script; see Appendix 13 for copy of notes made). Scores were awarded as follows:

- 3** *Question, instruction or script delivered exactly as specified*
- 2** *Question, instruction or script delivered partly as specified (e.g. rephrased)*
- 1** *Reference made to question, instruction or script but not sufficiently similar to convey the same meaning*
- 0** *Question, instruction or script omitted*

Scores were then weighted according to their frequency (for example four scores of 3 converted to a score of 12), with scores of 0 counting as -3 points to indicate that a piece of session plan was omitted. Totals were then converted to percentages (see Table 12, below), with a result of 93% fidelity indicating that the facilitator was following the script very well:

Item type	Total number of items in session	Score				Total	Possible total	%fidelity
		3	2	1	0 (-3)			
Explanation	5	4	0	0	1	9	15	60%
Key question	13	10	3	0	0	36	39	92%
Script	37	35	2	0	0	109	111	98%
OVERALL	55	49	5	0	1	154	165	93%

Table 12: Results of treatment fidelity exercise

Unfortunately, due to time constraints, it was not possible to observe every facilitator delivering the intervention. Instead, the researcher relied upon self-report by each facilitator that they were delivering it in a consistent way, i.e. following the script outlined in the session plans. Whilst acknowledging that facilitators may have been providing a socially desirable response to this question, the researcher anticipated that the way the session plans had been designed, the emphasis placed on the importance of delivery and the high fidelity score demonstrated by one of the facilitators would help ensure that the sessions were being delivered fairly consistently across settings.

3.2.6 Feedback to stakeholders

As previously stated, stakeholders identified in this study included the Headteachers of each school, the parents of participants, and the participants themselves. As part of the initial negotiation process, where Headteachers were approached about the possibility of their pupils taking part in this study, the researcher agreed with each Headteacher that the results of the study would be shared with them via a short written report on completion. For reasons of

confidentiality it was agreed that this would reflect the results of the whole sample rather than individual children.

In the permission letter sent to parents of selected children prior to the intervention, it was stated that the results of the study would be available to parents at their request. Parents would be given access both to the results of the sample as a whole (via the short written report), and for their child if requested.

Participants were made aware that the guided imagery intervention aimed to help them feel good about themselves and to get along better with peers. They were told that the results of the study would be shared with the SENCO and group facilitators, and would be discussed with them if they asked. Feedback about individual's performance on the Lawseq or SIS would be shared with them verbally, using age-appropriate language and without making reference to the scores of other participants.

In addition to feeding back to these stakeholders, the researcher agreed to share the results of the study with the EPS she originally designed the intervention for. This would be done via the short written report, which would also be shared with Deborah Plummer.

3.2.7 Ethical considerations

Within the postpositivist paradigm, the issue of ethics is considered particularly important because of the researcher's obligation to conduct robust, "good" research (Mertens, 2010). In line with this, Clegg & Slife (2009) state that ethical considerations should guide the entire process of planning, conducting and using research. The present study was therefore guided by the British Psychological Society's *Code of Ethics and Conduct* (BPS, 2006) and *Guidelines for Minimum*

Standards of Ethical Approval in Psychological Research (BPS, 2004), as outlined below.

In the spring term of 2009, when the researcher explained the nature and purpose of the guided imagery intervention and the nature of the screening instruments to the Headteacher of each school, all three Headteachers agreed in principle to their Year 3 and 4 pupils being considered for inclusion within the project. This provided an initial level of informed consent, which was followed by the parents of each child being sent a letter providing the same information. This letter gave parents the opportunity to refuse for their child to be considered to take part in the screening session, a process which – with the agreement of Headteachers – was done in the form of the “opt out” reply slip. Once children had been selected for potential inclusion in the experimental and control groups, parents were sent a second letter reiterating the nature and purpose of the intervention (see Appendix 9). This letter asked parents to complete the “opt in” slip if they consented to their child taking part.

The informed consent of participants was gained in two ways. At the beginning each whole class screening session, the researcher used a PowerPoint presentation to explain the nature of the intervention and of the screening instruments, introducing them to the idea of guided imagery and how it could be used to help them feel good about themselves and help them to get along well with peers. She then asked children to indicate their assent to taking part in the screening session by giving them the opportunity to decline answering the questionnaires if they preferred. Following this, children were informed that they could decline to answer any question put to them, but were made aware that this may affect their suitability to participate in the intervention. Informed consent was further gained at the beginning of the first guided imagery session, where facilitators reminded participants of the purpose of the intervention and asked them to sign a declaration (see Appendix 14) that reiterated their rights to withdrawal and confidentiality. This

form was written in age-appropriate, accessible language (the importance of this is stressed by Vargas & Montoya, 2009) and was explained verbally by facilitators.

At the beginning of the post-intervention assessment session, in which all children took part, the researcher used the same PowerPoint presentation to remind children of their rights to withdrawal and confidentiality, explaining that the assessments were being repeated “to see if anything had changed”. Children were told that the results of the study would be shared with the group facilitators and SENCO, and could be discussed with them if they asked.

It was considered important that children in the control groups were given the opportunity to take part in the intervention as, according to the selection criteria applied, these children had similarly “low” self-esteem to the children in the experimental groups. While it was not possible for schools to offer this within the time span of this study, facilitators were left with the skills and resources to be able to offer this at a later date and – as the researcher maintained her links with each school for the remainder of the academic year – she encouraged and supported schools to do this by raising the issue at her termly planning meetings and normal contact with the SENCO.

Any issues relating to child protection – should they have arisen – would have been treated in line with child protection procedures, and facilitators were reminded of this during the training session.

Finally, all data was made anonymous and kept confidential. Individual children’s data was identified simply by a code containing their school initial (A, B, or C), year group (4 or 5) and place in the class register (e.g. A412). Hard data (i.e. completed questionnaires) was stored securely in a locked cupboard and soft data (i.e.

spreadsheets of participants' scores) was stored electronically and protected with a password.

3.2.8 Permission and access

As the guided imagery intervention was originally designed by the researcher for use in a different EPS, she sought permission from the Senior EP who had supervised this to adapt and use the materials in this study.

The relaxation exercise in each session was taken from "*Using Interactive Imagework with Children - Walking on the Magic Mountain*" (Plummer, 1998), by kind permission of the author.

Chapter 4

Results

This chapter begins with an explanation of the different ways in which the collected data was analysed, and why these particular methods were chosen. The characteristics of the final sample will then be illustrated, followed by a detailed presentation of the results of data analysis. Results will be presented in relation to each research question, with key findings highlighted in bold. These key findings will be discussed further in Chapter 4, and placed in the context of existing literature.

4.1 Data analysis techniques employed in this study

4.1.1 Analysis of quantitative data

The two main research questions addressed by this study were:

- ***To what extent can guided imagery enhance the self-esteem of children in Key Stage 2?***
- ***To what extent can guided imagery increase the social inclusion of children in Key Stage 2?***

with a subsidiary question,

- ***To what extent are the self-esteem and social inclusion of children in Key Stage 2 associated?***

being addressed as a way of illustrating the relationship between self-esteem and social inclusion. To establish qualitative answers to these questions, the quantitative data collected during the present study was collated and organised, then subjected to a number of statistical tests using a computer package designed for use within the social sciences (SPSS: Statistical Package for the Social Sciences, Version 17.0). The main types of statistical test used were t-tests. ***Independent samples t-tests*** were used to analyse the significance of the difference in the mean scores of participants in both conditions, both in terms of their absolute scores at any time point and their gain scores (their post-intervention score minus their pre-intervention score), and ***paired-samples t-tests*** were used to analyse the significance of the change in mean scores of participants over the intervention period.

T-tests were used in preference to z-tests as there were less than 30 participants in each condition, as recommended by Rowntree (1981), and were used in preference to more complex tests such as Analysis of Variance (ANOVA) and Analysis of Covariance (ANCOVA) for the following reasons:

- ANOVA is more applicable to designs that involve data having been collected from participants in more than two conditions or at more than two time points. The design of this study was comparatively simple, with data being collected from participants in just two conditions (experimental and control) and at just two different time points (pre- and post-intervention).
- Both ANOVA and ANCOVA assume that the data set satisfies each of three criteria, as detailed by Dimitrov & Rumrill (2003). Firstly, participants are assumed to have been randomly allocated to the different conditions; secondly, it is assumed that there is a linear relationship between pre-test and post-test scores; and finally it is assumed that the regression lines for the different conditions are parallel to each other. Dancey & Reidy (2002) also state that for ANCOVA to be performed, the covariate (pre-test) should be measured without error, i.e. reliably. For each of the seven variables

investigated in this study, the only one of these four criteria that could be met satisfactorily was the first, regarding random allocation of participants to condition. It was therefore considered unsafe to proceed with either ANOVA or ANCOVA procedures.

- Repeated-measures ANOVA, the most relevant form of ANOVA to this design had it been employed (Huck & McLean, 1975) gives three statistics (or F-ratios) which relate to the size of the main effect of treatment, the main effect of time, and the interaction between treatment and time. The interaction effect, which is normally of most interest to the researcher, is actually mathematically equivalent to the square of the t value obtained through gain score analysis. Therefore, as gain score analysis is based on less precarious assumptions than ANOVA, it was felt that gain score analysis was a more efficient way of obtaining the same information.
- Reference is made within statistical literature to “Lord’s Paradox”, which describes a hypothetical situation offered by Lord (1967) in which a large treatment effect was found when using ANCOVA, but apparently no treatment effect was found when using gain score analysis. This would initially suggest that both should be regarded with caution; however, on closer inspection the confusion surrounding this paradox has been resolved by the realisation that the two methods actually answer two different research questions. As stated by Knapp & Schafer (2009), gain score analysis asks the question *“What is the effect of the treatment on the change from pre-test to post-test?”*, whereas ANCOVA asks *“What is the effect of the treatment on the post-test that is not predictable from the pre-test (i.e. conditional on the pre-test)?”*. The first two research questions addressed by the present study are analogous to the former of Knapp & Schafer’s questions, confirming that the use of gain score analysis was preferable to the use of ANCOVA.

After the first two research questions were addressed, effect sizes (or “Cohen’s d” value, after Cohen, 1988) were calculated for each variable. Effect sizes are values

calculated from the test statistic (t-value) and sample size in each case, using a widely-available calculation detailed by Rosnow, Rosenthal & Rubin (2000), which allow the reader of a study to compare the relative impact of the experimental treatment on different variables. This is different to considering the statistical significance of a result, which simply states whether or not there was a less than (normally) 5% chance that the result was achieved at random. Effect sizes can be qualified as being negligible (-0.15 to 0.15), small (0.15 to 0.40), medium (0.40 to 0.75), large (0.75 to 1.10), very large (1.10 to 1.45) and huge (exceeding 1.45).

In order to address the third research question, correlation coefficients were calculated to assess the nature of the linear relationship between self-esteem and the different social inclusion variables. Pearson's coefficients were employed due to the parametric nature of the data collected and because it is generally considered "*...an extremely robust statistic*" (Field, 2000, p87).

4.1.2 Analysis of qualitative data

Qualitative data - responses to questionnaires – was subjected to content analysis, to assess the effects that the guided imagery intervention was perceived to have had on participants' self-esteem and social inclusion. This entailed examining the participants' and respondents' written answers to the question "*How, if at all, has guided imagery helped you?*", with the question being reworded appropriately for facilitators. After an initial inspection of responses, seven different themes were identified: *increased self-confidence, increase in prosocial behaviour, decrease in peer problems, increase in resilience, positive impact upon affect, self-perceived increase in acceptance by peers, and enjoying the process of guided imagery* (an *other* category was created to contain responses that did not fit into the seven main categories). These categories were felt to be both exhaustive and mutually exclusive, which ensured that all responses could be categorised. Then, following the identification of these seven main themes, responses were individually judged

by the researcher and a colleague as to which of the categories they were most akin to. A tally was kept of this to aid the interpretation of results.

4.2 Characteristics of the final sample

Unfortunately, one Year 4 experimental group (School A) and one Year 5 experimental group (School C) did not receive the intervention. This was due to facilitator illness (School C) and timetabling issues which meant the facilitator did not have the capacity to run the sessions (School A). In addition to this, five children left school between screening and the beginning of the intervention, which further reduced the sample size. However, a final sample of 22 experimental group participants (9 boys, 13 girls) and 24 control group participants (13 boys, 11 girls) across all three schools remained at the beginning of the intervention, as outlined in Table 13:

School	Year group	Experimental n(boys, girls)	Control n(boys, girls)	Total
A	5	5 (3, 2)	6 (3, 3)	11 (6, 5)
B	4	5 (2, 3)	7 (5, 2)	12 (7, 5)
	5	7 (3, 4)	6 (2, 4)	13 (5, 8)
C	4	5 (1, 4)	5 (3, 2)	10 (4, 6)
Total		22 (9, 13)	24 (13, 11)	

Table 13: Number of participants in each intervention and control group

4.3

To what extent can guided imagery enhance the self-esteem of children in Key Stage 2?

4.3.1 Self-esteem – pre-intervention

Self-esteem was measured using the Lawseq (Lawrence, 1982), where higher scores corresponded to higher self-esteem. Descriptive statistics for the self-esteem scores for the experimental and control groups prior to the intervention are detailed in Table 14:

Condition	n	Mean	SD	Min.	Max.	Median	Range	Skewness
Exp.	22	12.45	4.11	4	22	12.45	18	0.34
Control	24	12.58	2.52	8	16	13	8	-0.285

Table 14: Descriptive statistics for the Lawseq scores of participants in the experimental and control groups, prior to the intervention

The standard deviations and skew values indicated that the data for each condition was approximately normally distributed (a sampling distribution that has a standard deviation of more than half its skew value is generally assumed to be normally distributed; Coolican, 2009) so parametric tests were used to analyse the results. An independent samples t-test was conducted to establish whether the self-esteem scores of participants in the experimental and control groups were statistically equivalent to each other prior to the intervention. This showed that there was no significant difference between the mean Lawseq scores of participants in both conditions ($t(44) = -.129, p = .90$). Therefore, it can be assumed that there was no difference in the self-esteem scores of participants in the experimental and control groups prior to intervention.

4.3.2 Change in self-esteem score over the intervention period

Descriptive statistics for the self-esteem scores for the experimental and control groups at the end of the intervention period are detailed in Table 15:

Condition	N	Mean	SD	Min.	Max.	Median	Range
Exp.	21	13.81	5.51	4	22	14	18
Control	23	17.91	5.20	7	24	18	17

Table 15: Descriptive statistics for the self-esteem scores of participants in the experimental and control groups, after the intervention

From Tables 14 and 15 it can be seen that mean Lawseq self-esteem scores of participants in both conditions increased over the intervention period. This is illustrated by Figure 3:

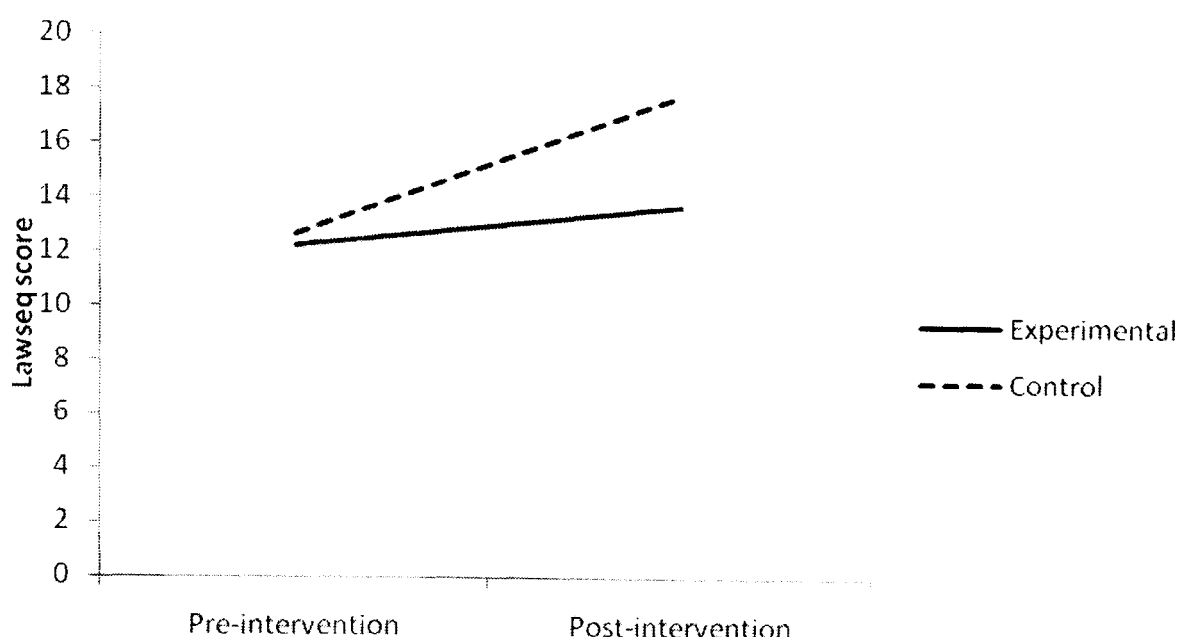


Figure 3: Line graph to show changes in mean Lawseq scores over the intervention period, for both conditions

Post-hoc paired-samples t-tests showed that the Lawseq scores of the children who received the guided imagery intervention did not change significantly over time ($t(20) = -1.49, p = .153$), however the scores of the children who did not receive the intervention *did* increase significantly ($t(22) = -6.01, p < .001$). Gain score analysis confirmed that the changes in score did differ significantly between condition ($t(42) = -2.68, p < .02$). A two-tailed independent samples t-test showed that the mean Lawseq scores of participants in both conditions also differed significantly at the end of the intervention ($t(42) = -2.54, p < .02$). ***Therefore, improvements were seen in the self-esteem of some participants over the intervention period, but for children in the control condition rather than the intervention condition.***

Feedback questionnaires were returned by all experimental participants ($n = 21$), and by two of the five facilitators. Content analysis showed that some of these respondents reported positive changes in factors relating to the participants' self-esteem. Figure 4 shows how many respondents reported each effect:

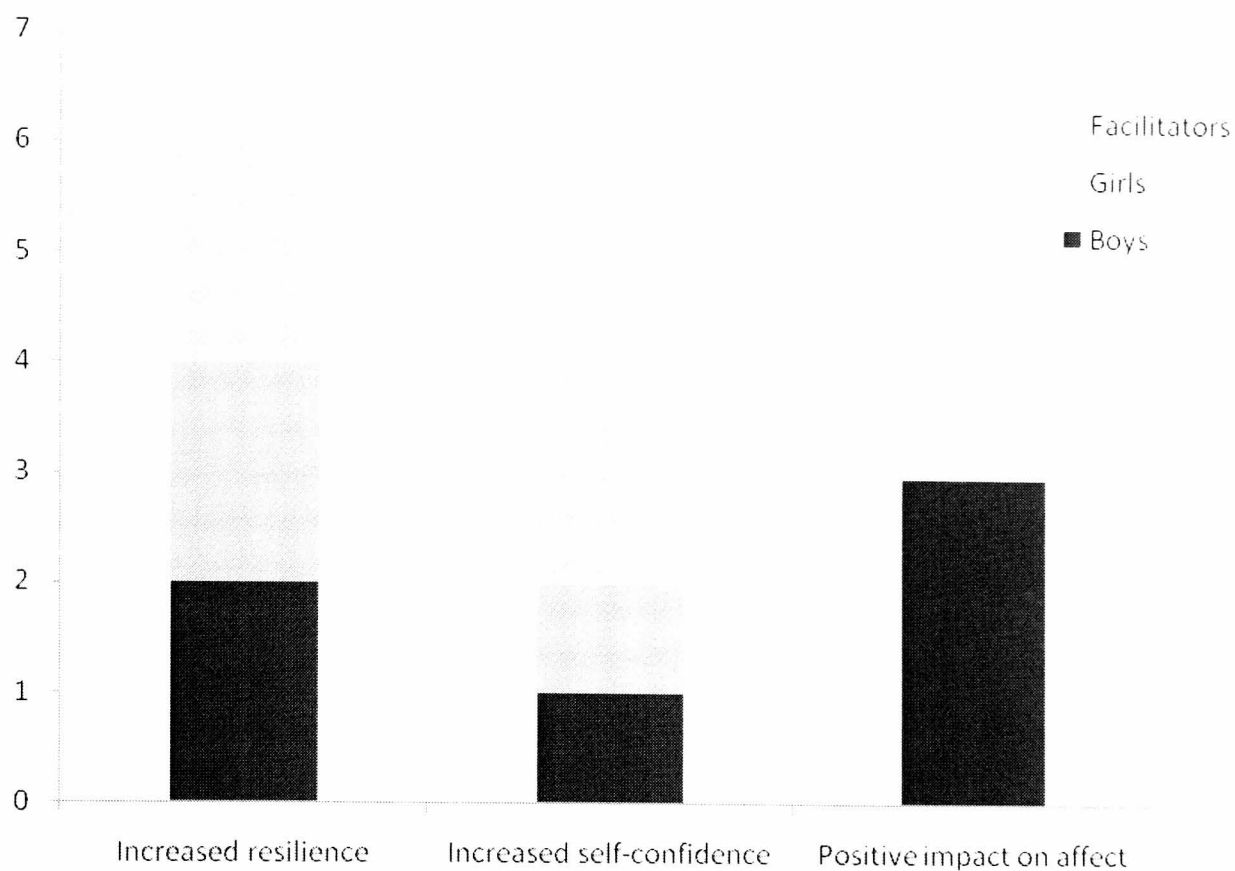


Figure 4: Bar graph to show the numbers of experimental participants (boys and girls) and facilitators reporting positive effects on factors relating to self-esteem when asked “How, if at all, has guided imagery helped you/participants?”

This indicates that, although the Lawseq scores of participants who received the guided imagery intervention did not significantly increase over the intervention period, *some of those participants, and the facilitators, did feel that the intervention had had a positive effect on factors relating to participants’ self-esteem.* This will be explored in Chapter 5.

4.4 To what extent can guided imagery reduce the social exclusion of children in Key Stage 2?

4.4.1 Social Inclusion – pre-intervention

Social exclusion was measured using two instruments, the Social Inclusion Survey (SIS; Frederickson & Graham, 1999), and the Problems and Prosocial Behaviour subscales of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). The SIS was completed by children in each Year 3 and Year 4 class during the screening sessions, and gave an indication of the extent to which peers would like to work and play with each participant. Higher scores represented a higher degree of acceptance by peers, and results were analysed at two levels – acceptance by same-sex classmates and acceptance by all classmates. Meanwhile, the Peer Problems and Prosocial Behaviour subscales of the SDQ were completed by group facilitators and gave an indication of how well each participant was perceived to socialise with their peers (with lower Peer Problems scores being desirable) and the extent to which they displayed socially acceptable behaviours (with higher Prosocial Behaviour scores being desirable).

Means and standard deviations of these scores for the experimental and control groups prior to the intervention are detailed in Table 16 (SDQ questionnaires were not returned for three of the participants prior to the intervention, hence smaller sample sizes for these variables).

PRE-INTV'N	Condition	N	Mean	SD	Min.	Max.	Median	Range	Skew
SIS-Work Same sex	Exp.	22	5.05	3.71	-5	9	6.50	14	-1.025
	Control	24	4.58	3.23	-4	9	6.0	13	-1.043
SIS-Work Total	Exp.	22	0.64	5.33	-9	10	-0.50	19	0.212
	Control	24	1.00	5.91	-9	12	0	17	0.241
SIS-Play Same sex	Exp.	22	5.00	4.00	-6	10	7	16	-1.267
	Control	24	5.08	3.79	-7	11	6	18	-1.527
SIS-Play Total	Exp.	22	-0.45	5.60	-10	9	0.50	19	-0.90
	Control	24	-0.71	5.68	-13	9	-0.50	22	-0.453
Peer Problems	Exp.	20	2.10	1.52	0	4	2	4	-0.186
	Control	23	2.39	2.21	0	8	1	8	0.92
Prosocial Behaviour	Exp.	20	7.95	2.11	4	10	8.50	6	-0.484
	Control	23	7.39	2.41	4	10	8	6	-0.400

Table 16: Descriptive statistics for the social inclusion scores of participants in the experimental and control groups, prior to the intervention

As the standard deviations and skew values indicated that the data for each variable was approximately normally distributed, parametric tests were used to analyse the results. Independent samples t-tests indicated that, pre-intervention, the groups were equivalent to each other across each variable; SIS-Work(ss) ($t(44) = .452, p > .05$), SIS-Work(tot) ($t(44) = -.218, p > .05$), SIS-Play(ss) ($t(44) = -0.73, p > .05$), SIS-Play(tot) ($t(44) = .152, p > .05$), Peer Problems ($t(41) = -.509, p > .05$), and Prosocial Behaviour ($t(41) = .803, p > .05$). Therefore it can be assumed that there was no difference in the social inclusion scores of participants in both conditions prior to intervention.

4.4.2 Change in SIS-Work scores over the intervention period – acceptance by same-sex peers

Descriptive statistics for the mean SIS-Work(ss) scores of participants in both conditions at the end of the intervention are shown in Table 17:

Condition	N	Mean	SD	Min.	Max.	Median	Range
Exp.	22	6.41	2.46	-1	10	6	12
Control	24	5.42	3.72	-4	11	5.5	15

Table 17: Descriptive statistics for the SIS-Work(ss) scores of participants in the experimental and control groups, after the intervention

From a comparison of the data in Tables 16 and 17 it can be seen that mean SIS-Work(ss) scores of participants in both conditions increased over the intervention period. This is illustrated by Figure 5:

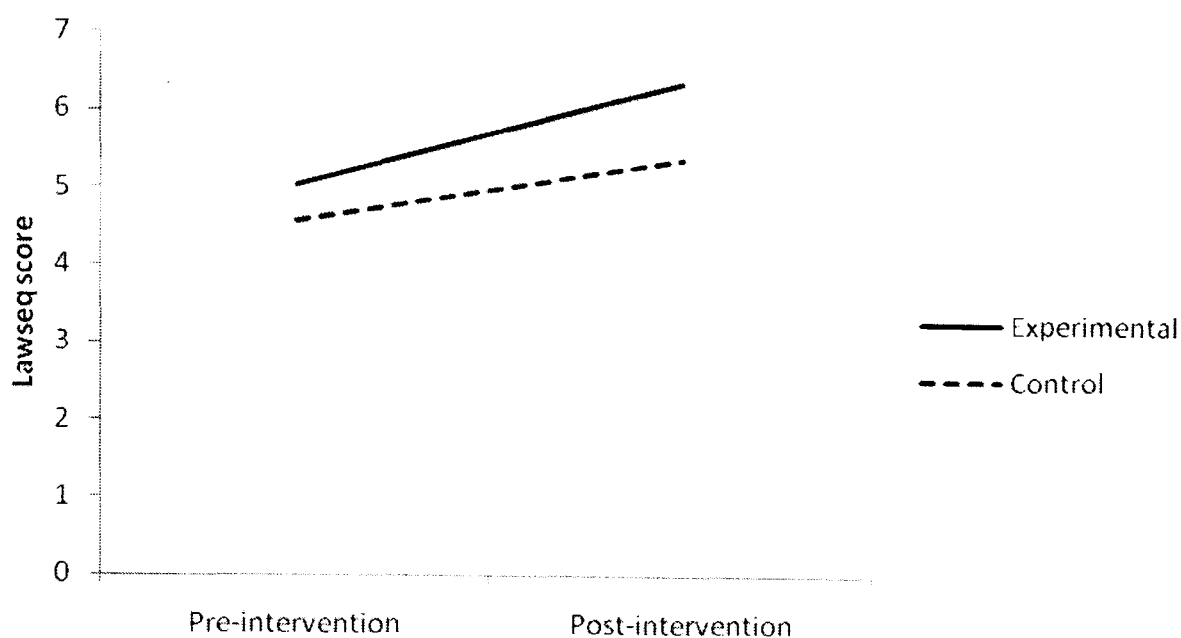


Figure 5: Line graph to show changes in mean SIS-Work(ss) scores over the intervention period, for both conditions

Post-hoc paired-samples t-tests showed that the increases in SIS-Work(ss) scores did not reach statistical significance for either the children who received the guided imagery intervention ($t(21) = -1.88, p = .07$) or the children who did not receive the intervention ($t(23) = -1.15, p = .26$). Gain score analysis confirmed that there was no significant difference in the gains made by participants in either condition ($t(44) = .52, p = .61$). A two-tailed independent samples t-test showed that the mean SIS-Work(ss) scores of participants in both conditions were not significantly different at the end of the intervention ($t(44) = 1.06, p = .30$). **Therefore, the guided imagery intervention appeared to have had no significant effect on the extent to which participants in either condition were perceived as more acceptable workmates by same-sex peers.**

4.4.3 Change in SIS-Work scores over the intervention period – acceptance by all peers

Descriptive statistics for both conditions at the end of the intervention are shown in Table 18:

Condition	N	Mean	SD	Min.	Max.	Median	Range
Exp.	22	1.73	5.51	-11	11	2	22
Control	23	0.79	6.19	-13	13	1	26

Table 18: Descriptive statistics for the SIS-Work(tot) scores of participants in the experimental and control groups, after the intervention

A comparison of the data in Tables 16 and 18 shows that mean SIS-Work(tot) scores of participants in the experimental group slightly increased over the intervention period, whilst the scores of participants in the control condition slightly decreased. These changes are illustrated by Figure 6:

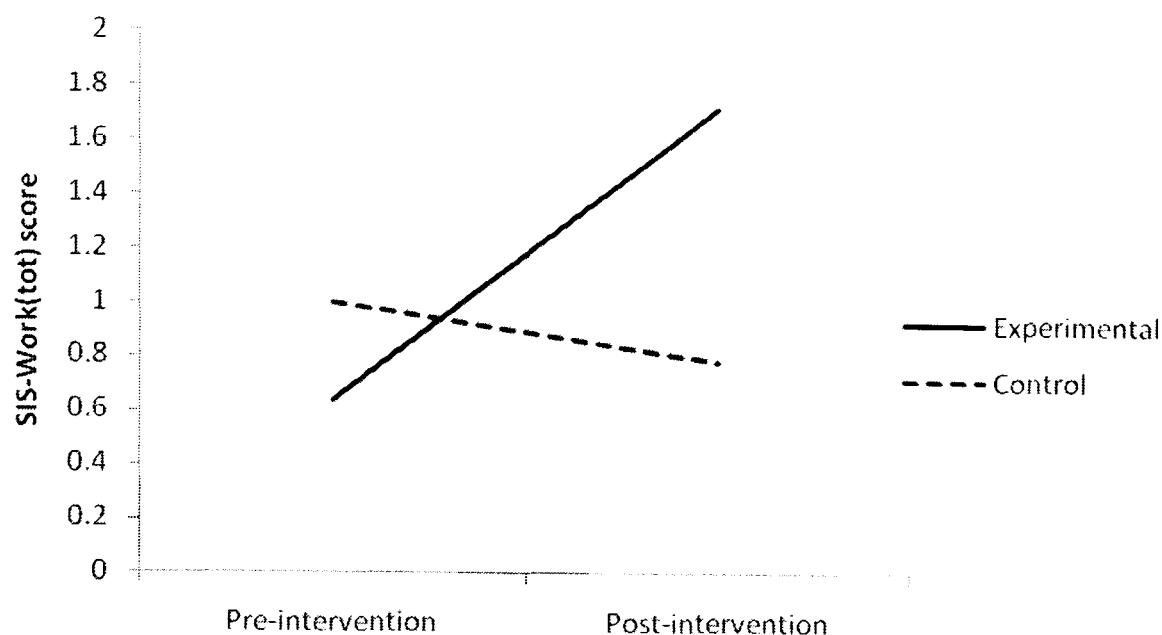


Figure 6: Line graph to show changes in mean SIS-Work(tot) scores over the intervention period, for both conditions

Post-hoc paired-samples t-tests showed that the changes in SIS-Work(tot) scores did not reach statistical significance for either the children who received the guided imagery intervention ($t(21) = 1.46, p = .16$) or the children who did not receive the intervention ($t(23) = -0.218, p = .83$). Gain score analysis confirmed that there was no significant difference in the changes in scores for participants in either condition ($t(44) = 1.06, p = .30$). A two-tailed independent samples t-test showed that the mean SIS-Work(tot) scores of participants in both conditions were not significantly different at post-intervention testing ($t(44) = .54, p = .59$). ***Therefore, the guided imagery intervention appeared to have had no significant effect on the extent to which participants in either condition were perceived as more acceptable workmates by all peers.***

4.4.4 Change in SIS-Play scores over the intervention period – acceptance by same-sex peers

Descriptive statistics for both conditions at the end of the intervention are shown in Table 19:

Condition	N	Mean	SD	Min.	Max.	Median	Range
Exp.	22	4.86	3.62	-7	9	6	16
Control	24	4.38	3.42	-3	11	5	14

Table 19: Descriptive statistics for the SIS-Play(ss) scores of participants in the experimental and control groups, after the intervention

A comparison of the data in Tables 16 and 18 shows the mean SIS-Play(ss) scores of participants in both conditions slightly decreased over the intervention period. This change is illustrated by Figure 7:

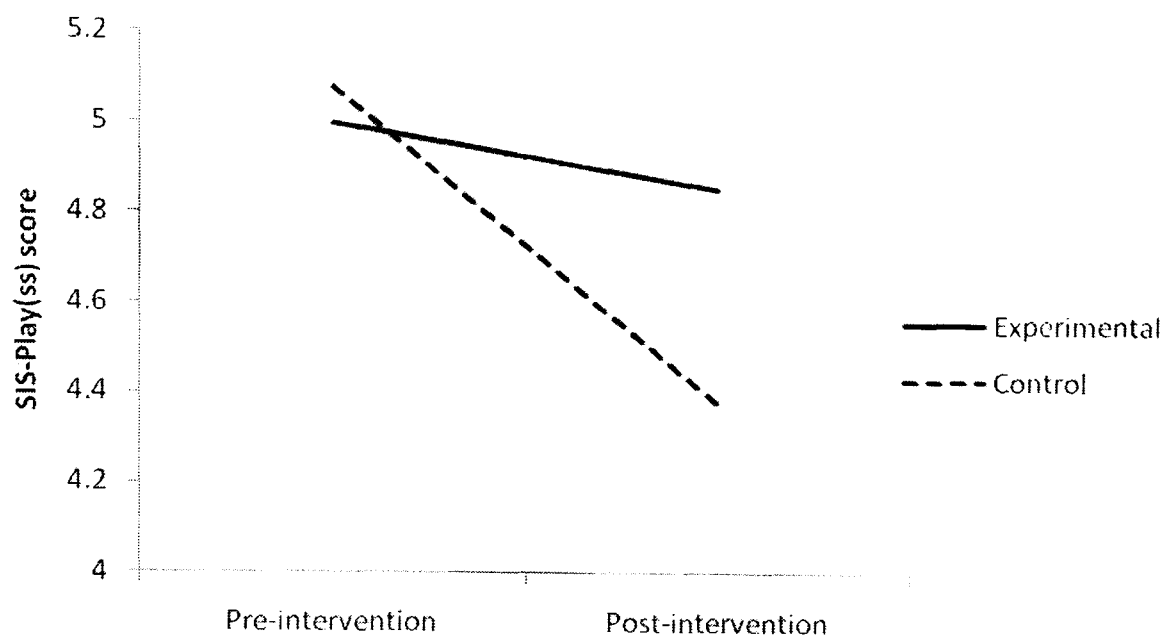


Figure 7: Line graph to show changes in mean SIS-Play(ss) scores over the intervention period, for both conditions

Mean SIS-Play(ss) scores of participants in both conditions slightly decreased over the intervention period. Post-hoc paired-samples t-tests showed that the decreases in SIS-Play(ss) scores did not reach statistical significance for either the children who received the guided imagery intervention ($t(21) = .21, p = .84$) or the children who did not receive the intervention ($t(23) = 1.07, p = .30$). A two-tailed independent samples t-test showed that the mean SIS-Play(ss) scores of participants in both conditions did not significantly differ at the end of the intervention ($t(44) = .47, p = .64$). Gain score analysis indicated that the changes in SIS-Play scores of participants in the intervention condition did not differ significantly to the changes in score of participants in the control condition ($t(44) = .61, p = .54$). **Therefore, the guided imagery intervention appeared to have had no significant effect on the extent to which participants in either condition were perceived as more acceptable playmates by same-sex peers.**

4.4.5 Change in SIS-Play scores over the intervention period – acceptance by all peers

Descriptive statistics for both conditions at the end of the intervention are shown in Table 20:

Condition	N	Mean	SD	Min.	Max.	Median	Range
Exp.	22	-1.45	5.75	-14	9	-2	23
Control	24	-1.54	5.93	-12	9	-2	21

Table 20: Descriptive statistics for the SIS-Play(tot) scores of participants in the experimental and control groups, after the intervention

A comparison of the data in Tables 16 and 20 shows the mean SIS-Play(tot) scores of participants in both conditions slightly decreased over the intervention period. This change is illustrated by Figure 8:

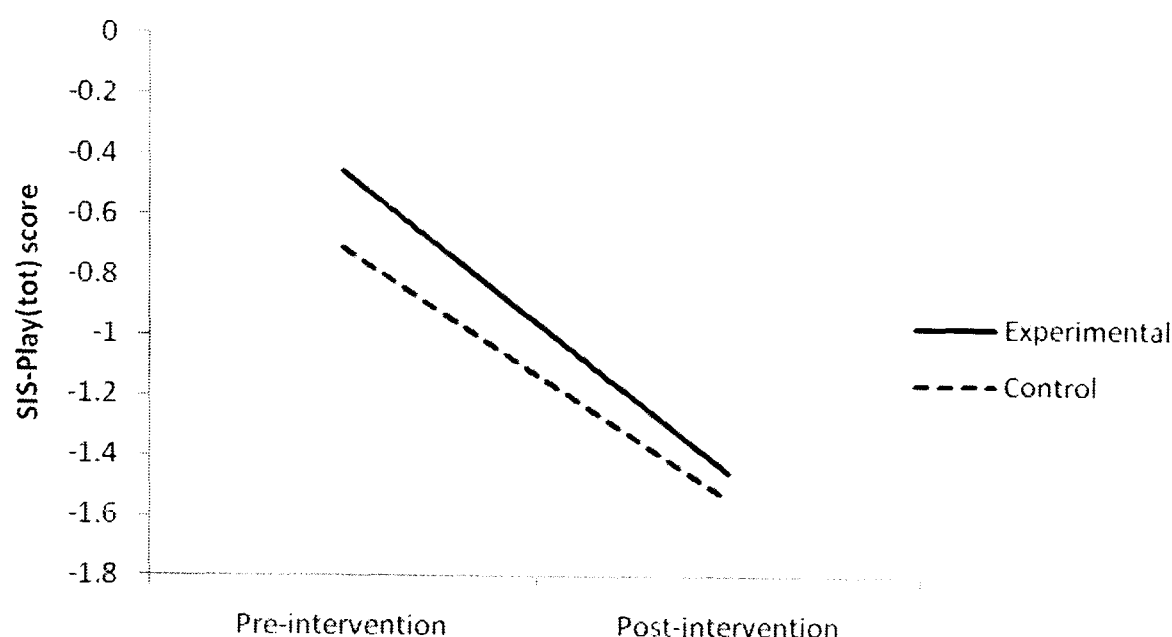


Figure 8: Line graph to show changes in mean SIS-Play(tot) scores over the intervention period, for both conditions

Post-hoc paired-samples t-tests showed that the decreases in SIS-Play(tot) scores did not reach statistical significance for either the children who received the guided imagery intervention ($t(21) = -.69, p = .50$) or the children who did not receive the intervention ($t(23) = -1.09, p = .29$). Gain score analysis confirmed that there was no significant difference in the changes in score between participants in both conditions ($t(44) = -0.10, p = .92$). A two-tailed independent samples t-test showed that the mean SIS-Play(tot) scores of participants in both conditions were not significantly different at the end of the intervention ($t(44) = .05, p = .96$). ***Therefore, the guided imagery intervention appeared to have had no significant effect on the extent to which participants in either condition were perceived as more acceptable playmates by all peers.***

4.4.6 Change in Peer Problems scores over the intervention period

Unfortunately, post-intervention SDQ questionnaires were not returned for 15 children, meaning that the pre-post comparison sample was smaller in size for analysis of both the Peer Problems and Prosocial Behaviour scores. Descriptive

statistics for the Peer Problems scores for the remaining experimental and control children at the beginning of the intervention period are detailed in Table 21, with the skewness figure indicating that the data was normally distributed.

Condition	N	Mean	SD	Min.	Max.	Median	Range	Skewness
Exp.	14	2	1.62	0	4	2	4	0.000
Control	17	2.35	2.03	0	6	1	6	0.42

Table 21: Descriptive statistics for the Peer Problems scores of participants in the experimental and control groups, prior to the intervention

The same statistics for the control and experimental groups at the end of the intervention are detailed in Table 22:

Condition	N	Mean	SD	Min.	Max.	Median	Range
Exp.	14	0.50	0.86	0	2	0	2
Control	17	1.24	1.52	0	6	1	6

Table 22: Descriptive statistics for the Peer Problems scores of participants in the experimental and control groups, after the intervention

Comparison of the data in Tables 21 and 22 indicated that the mean Peer Problems scores of participants in both conditions decreased over the intervention period (which, in contrast to the patterns desired in results of the other SDQ measures, was the desired effect). This change is illustrated in Figure 9:

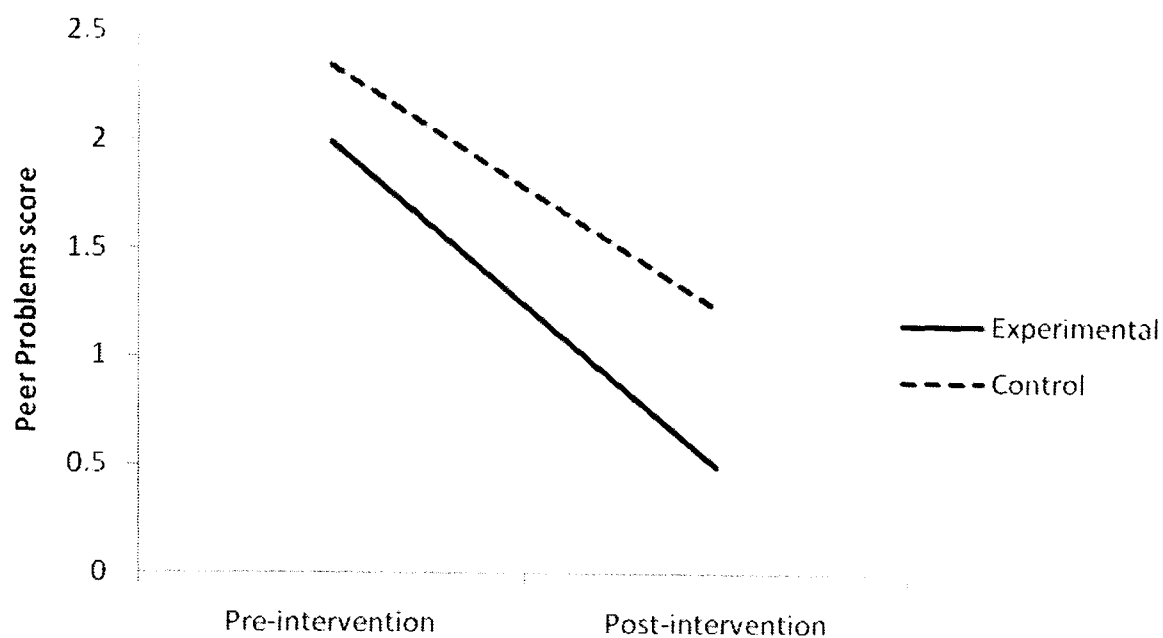


Figure 9: Line graph to show changes in mean Peer Problems scores over the intervention period, for both conditions

Post-hoc paired-samples t-tests showed that the decrease in Peer Problems scores reached statistical significance in both the children who received the guided imagery intervention ($t(13) = -3.50, p < .005$) and the children who did not receive the intervention ($t(16) = -2.24, p < .05$). A two-tailed independent samples t-test showed that the mean Peer Problems scores of participants in both conditions were significantly different at the end of the intervention ($t(32) = -2.13, p < .05$). However, gain score analysis showed that there was no significant difference in the amount by which Peer Problems scores of participants in each group changed over the course of the intervention ($t(29) = -0.57, p = .58$). **Therefore, although all participants – not just participants who received the guided imagery – appeared to become significantly better at interacting with peers over the intervention period, there was no difference in the changes made between participants in both conditions.**

4.4.7 Change in Prosocial Behaviour scores over the intervention period

Descriptive statistics for the Prosocial Behaviour scores for the remaining experimental and control children at the beginning of the intervention period are detailed in Table 23. Again, the skewness figure indicates that the data was approximately normally distributed.

Condition	N	Mean	SD	Min.	Max.	Median	Range	Skewness
Exp.	14	8.57	1.79	5	10	9.5	5	-0.846
Control	17	7.47	2.21	4	10	8	6	-0.604

Table 23: Descriptive statistics for the Prosocial Behaviour scores of participants in the experimental and control groups, prior to the intervention

The same statistics for the control and experimental groups at the end of the intervention are detailed in Table 24:

Condition	N	Mean	SD	Min.	Max.	Median	Range
Exp.	14	8.86	1.92	3	10	9.5	7
Control	17	8.76	1.60	5	10	10	5

Table 24: Descriptive statistics for the Peer Problems scores of participants in the experimental and control groups, after the intervention

A comparison of the figures in Tables 23 and 24 indicated that the mean Prosocial Behaviour scores of participants in both conditions slightly increased over the intervention period. This change is illustrated in Figure 10:

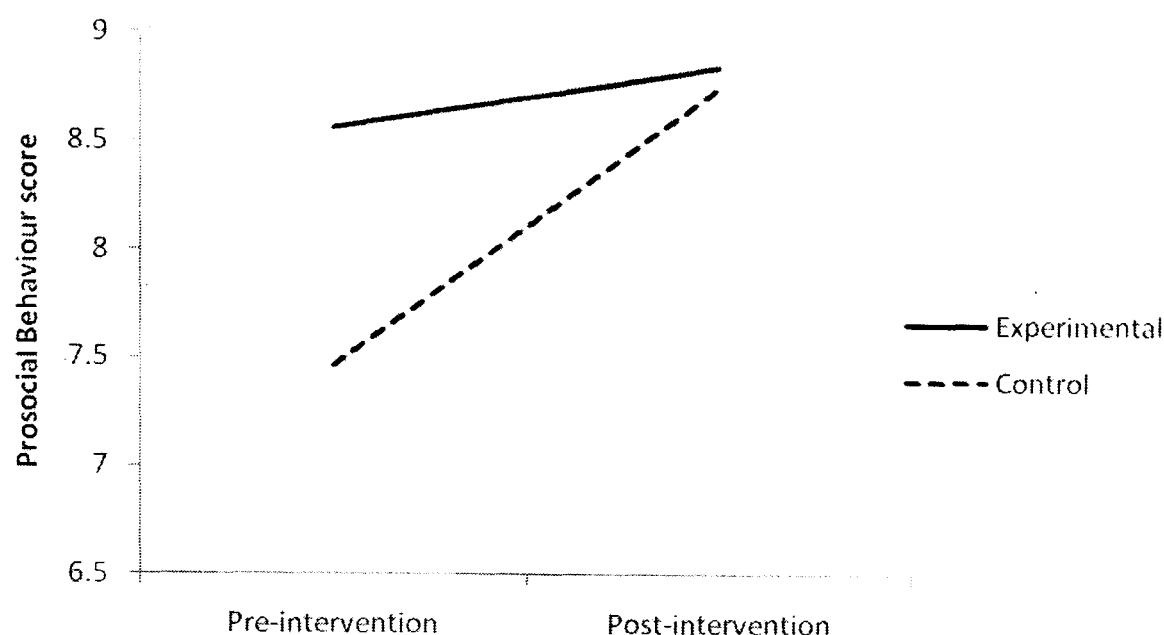


Figure 10: Line graph to show changes in mean Prosocial Behaviour scores over the intervention period, for both conditions

Post-hoc paired-samples t-tests showed that the increase in Prosocial Behaviour scores was not statistically significant either for children who received the intervention ($t(13) = .46, p = .655$) or for children who did not receive the intervention ($t(16) = 2.72, p = .015$). A two-tailed independent samples t-test showed that the mean Prosocial Behaviour scores of participants in both conditions were not significantly different post-intervention ($t(32) = .29, p = .78$). Gain score analysis confirmed that there was no significant difference in the amount by which SIS-Work(ss) scores of participants in each group changed over the course of the intervention ($t(29) = -1.31, p = .20$). **Therefore, the guided imagery appears to have had no significant effect on the extent to which participants in either condition displayed prosocial behaviours.**

Content analysis indicated that many of the 21 respondents reported positive effects of the intervention on factors relating to the social inclusion of participants. Figure 11 shows how many respondents reported effects that fitted into each category:

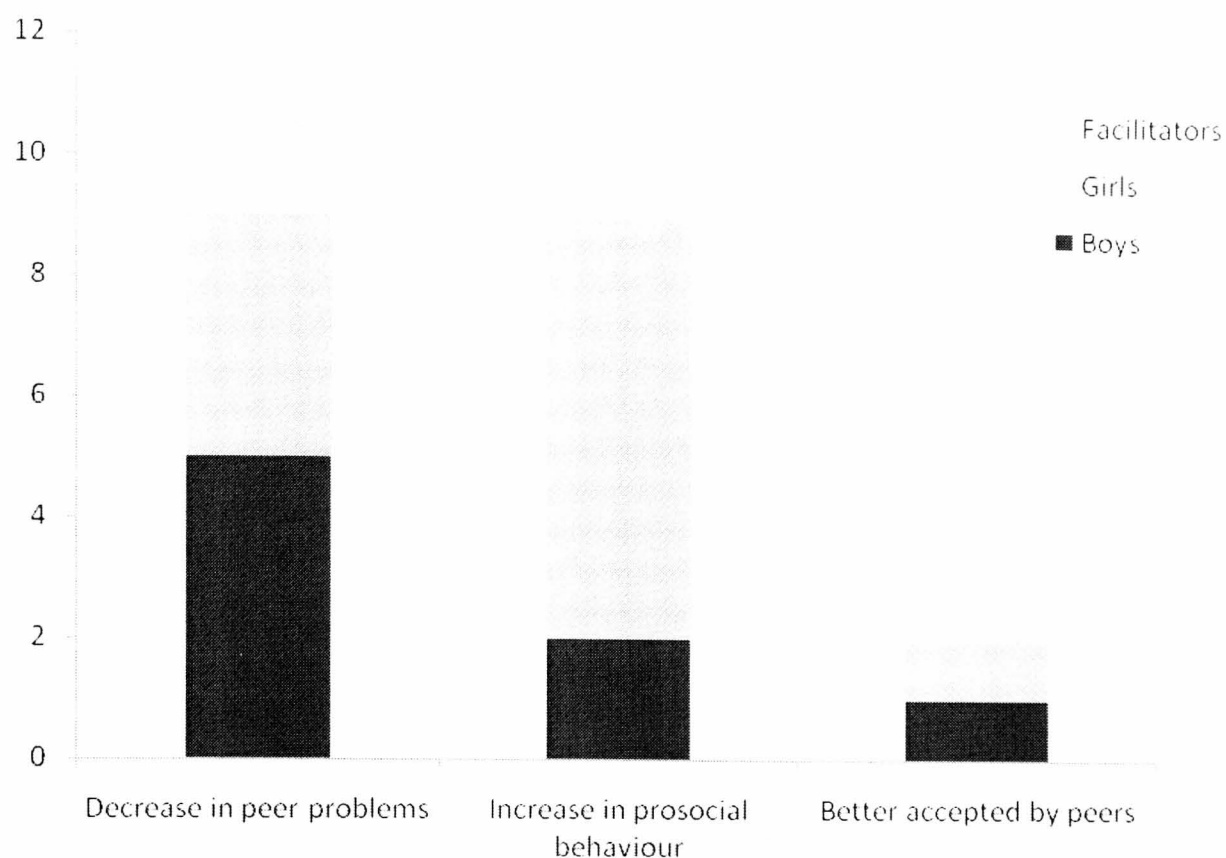


Figure 11: Bar chart to show the numbers of experimental participants (boys and girls) and facilitators reporting positive effects on factors relating to social inclusion when asked “How, if at all, has guided imagery helped you/participants?”

This illustrates that although few significant changes were measured in the social inclusion of participants who received the guided imagery, **many of those participants, and the group facilitators, did feel that the intervention had had a positive impact upon factors relating to participants’ social inclusion.** This will be explored further in the discussion section.

4.5 Effect sizes to qualify the effect of the intervention on each variable

Using an Excel spreadsheet accessed online through the downloadable article by Thalheimer & Cook (2002), Cohen’s d values were calculated to show the size of the effect of condition on each variable. These effect sizes are illustrated in Figure 12:

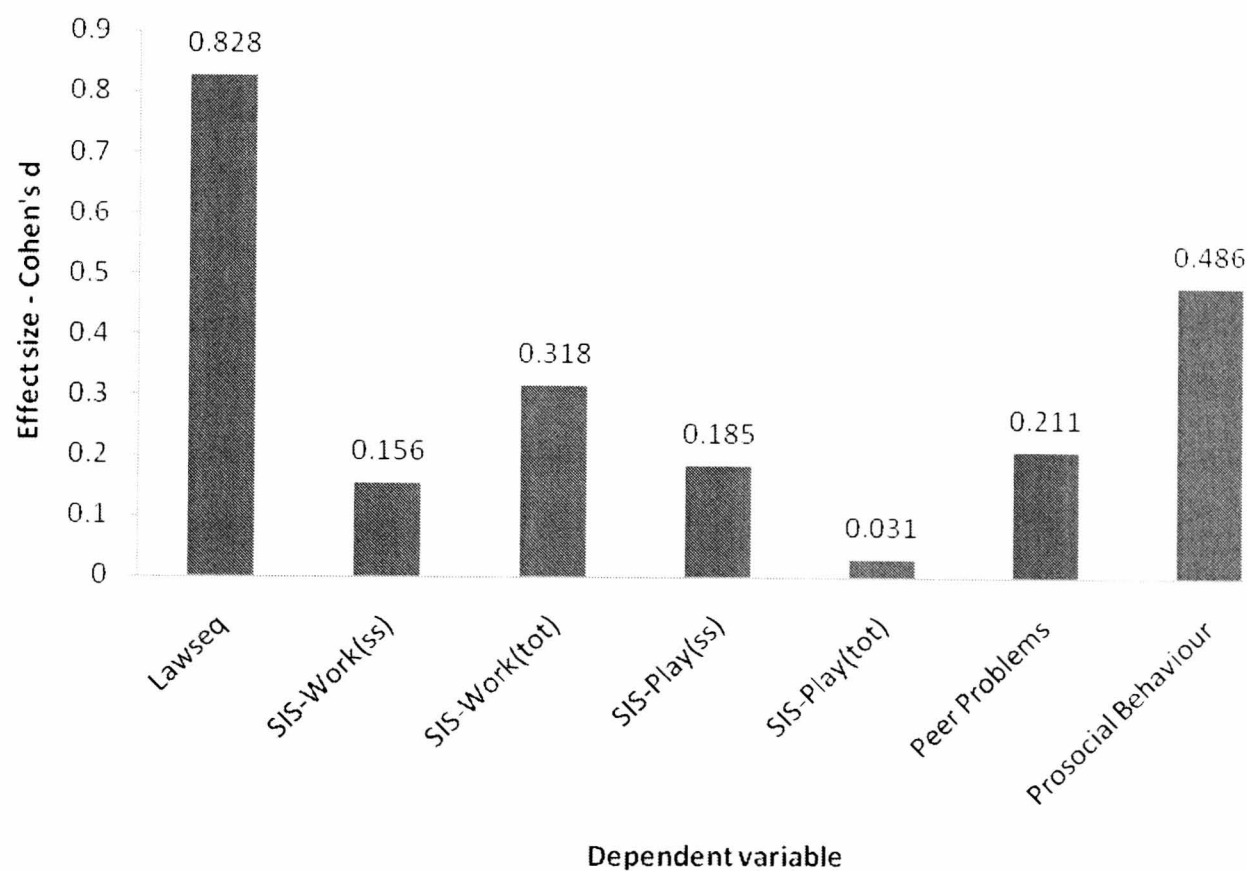


Figure 12: Bar chart to show the size of the effect of the intervention on each variable

Figure 12 shows that condition had a large effect on Lawseq scores, a medium effect on Prosocial Behaviour scores, and a small effect on all other scores apart from SIS-Play(tot) scores, where the effect of condition was negligible. Of all the variables, therefore, the guided imagery intervention appears to have had the biggest impact on self-esteem; however this needs to be considered in the light of information previously presented.

4.6 To what extent are the self-esteem and social inclusion of children in Key Stage 2 associated?

To investigate the degree to which self-esteem was statistically associated with the different measures of social inclusion, parametric tests of correlation were conducted on the pre-intervention data. These showed that the Lawseq scores of participants were positively but weakly related to their SIS-Play(tot) scores ($r = .26$, $p = .08$) and Peer Problems scores ($r = .15$, $p = .33$). Lawseq scores were negatively but weakly related to SIS-Work(ss) scores ($r = -.23$, $p = .13$), SIS-Work(tot) scores ($r = -.20$, $p = .19$), SIS-Play(ss) scores ($r = -.10$, $p = .51$), and Prosocial Behaviour scores ($r = -.13$, $p = .42$). It can be seen that none of these relationships reached statistical significance at the .05 level, and as none of the squares of the regression coefficients exceeded approximately 0.3, no further exploratory activities, such as regression analysis, were carried out (as advocated by Robson, 2002). ***Self-esteem was therefore not significantly correlated with any of the social inclusion measures prior to intervention.***

The same parametric tests were conducted on the data collected post-intervention, to see how strongly self-esteem was associated with the measures of social inclusion after the intervention. Again, positive but weak relationships were found to exist between Lawseq scores and SIS-Play(ss) scores ($r = .05$, $p = .77$), Peer Problems scores ($r = .12$, $p = .52$) and Prosocial Behaviour ($r = .02$, $p = .91$). Negative but weak correlations were found to exist between Lawseq scores and SIS-Work(ss) scores ($r = -.05$, $p = .74$), SIS-Work(tot) scores ($r = -.21$, $p = .18$), and SIS-Play(tot) scores ($r = 0.17$, $p = .27$). None of these relationships reached statistical significance at the .05 level. ***As with the pre-intervention measures, the lack of a significant relationship between self-esteem and any of the social inclusion measures at the end of the intervention*** meant there was no reason to conduct any further exploratory analysis.

4.7 Summary of results

From the findings presented above, it appears that the guided imagery intervention made little difference to the self-esteem of participants in the experimental condition; however the self-esteem of participants in the control condition significantly increased over the same period. In relation to measures of social inclusion, it appears that participants who took part in the guided imagery intervention made no more significant progress than participants who did not. In addition to this, there was no evidence of positive or significant correlations between self-esteem and the different measures of social inclusion. These results will be considered in more detail in Chapter 5.

Chapter 5

Discussion

The results presented in the previous chapter will now be examined in more detail, and placed in the context of existing literature. Key results will be firstly discussed in relation to each of the two main research questions, “To what extent can guided imagery enhance the self-esteem of children in Key Stage 2?” and “To what extent can guided imagery increase the social inclusion of children in Key Stage 2?”, then synthesised by the discussion of the third question, “To what extent are the self-esteem and social inclusion of children in Key Stage 2 associated?”. Following this, the methodology of this study will be reviewed, which will include a consideration of the assessment methods used, and discussion around factors that may have affected its internal and external validity. Finally, the ethical considerations of this study will be discussed, and the implications of this study for future research and professional practice will be explored.

5.1 To what extent can guided imagery enhance the self-esteem of children in Key Stage 2?

5.1.1 Review of key findings in relation to existing literature

The self-esteem of participants was assessed using the Lawseq (Lawrence, 1982), a 16 item questionnaire completed by each participant. To reiterate, quantitative comparison of the self-esteem data collected before and after the intervention showed that:

- *Lawseq scores of the children who received the guided imagery intervention did not change significantly over time; however the scores of the children who did not receive the intervention did increase significantly.*
- *The difference between the changes made by each group was significant.*
- *At the end of the intervention, the mean Lawseq scores of participants who received the guided imagery intervention were significantly higher than the scores of participants who had not received the intervention.*

These results therefore reflect ***improvements in the self-esteem of some participants over the intervention period, but for children in the control condition rather than the intervention condition.*** This result is somewhat unexpected but needs to be considered in light of some possible explanations.

Firstly, self-esteem was measured by only one instrument. The Lawseq asked participants to indicate on a three-point scale (*yes, no, don't know*) how much they agreed with sixteen different statements, four of which did not count towards the final score. It can therefore be argued that the Lawseq gave only a brief "snapshot" of the respondents' self-esteem, if indeed this is what the instrument actually measured (this is an issue of construct validity and will be discussed in more detail later on). As it was a self-report instrument it was also vulnerable to a number of potential threats, such as respondents giving socially desirable responses rather than truthful answers (cf. Brinthaupt & Erwin, 1992; Blascovich & Tomaka, 1991), and respondents possibly not possessing sufficient levels of verbal competence or the cognitive capacity to reflect objectively upon themselves (Brinthaupt & Erwin, 1992). Lawrence (1987) himself acknowledges the limitations of the Lawseq, saying *"It is obvious that people can fake their responses and also may be subject to "social desirable" response, that is, they will tend to reply in a socially accepted way. Moreover, some students may not be able to describe their feelings accurately."* (p15). The data gained through use of the Lawseq should, therefore – like all data

obtained through use of self-report techniques – be treated with some caution, as it may not be an accurate representation of participants' self-esteem.

However, despite these considerations, the quantitative results of this study still indicated that the self-esteem of the control participants increased significantly over the intervention period, whereas the self-esteem of the participants who took part on the guided imagery sessions remained stable. This finding cannot be explained by the exposure of control participants to other interventions or activities which could have targeted their self-esteem, as the study took place across two year groups and three different primary schools. Neither can it be explained by the control participants perceiving the experimental participants as somehow having been “targeted” due some kind of difficulty (as, for example, children may perceive those who take part in a reading intervention group), as informal verbal feedback from facilitators indicated that the experimental participants enjoyed the sessions so much that control participants would ask when it was their turn to take part.

Instead, it could be that the stable results seen in the experimental participants show the pattern which would be expected over time, and the slight increase in self-esteem seen in the control participants was genuinely due to chance rather than any other factors. However, this hypothesis opens a wider question of whether any intervention *can* really enhance global self-esteem; and opens the question of whether any intervention that claims to effect such changes may simply be enhancing self-esteem in very specific domains rather than at the global level. These issues will be revisited in more detail later on; suffice to say now that more specific assessment of participants' self-esteem in different domains would help to assess whether there were any changes in social or emotional self-esteem.

5.1.2 The stability of self-esteem

The two hypotheses presented above need to be considered in light of the literature that examines whether global self-esteem – a subject judgement about the self – remains stable over time. As discussed in Chapter 2, a number of studies present evidence to support the hypothesis that self-esteem does remain more or less stable (e.g. Marsh *et al*, 2006; Crocker & Wolfe, 2001; Baumeister, 1991; Shavelson *et al*, 1976; Harter, 2006), although research has predominantly been conducted in preadolescent and adolescent age groups (Trzesniewski, Donnellan & Robbins, 2003).

In order to examine the stability of self-esteem over life span including childhood, Trzesniewski *et al* (2003) recently conducted a meta-analysis of 50 published articles and 4 large scale national (American) studies. Test-retest correlations of global self-esteem after a one year interval was found to be .4 for 8 year olds and .5 for teenagers, findings that were not attributable to age differences in the reliability of self-esteem measures. These results mirrored those observed in personality traits, and therefore suggest that self-esteem is relatively stable over time. However, the authors of this study observed that whereas the stability of global self-esteem was low during childhood, it became increasingly stable through adolescence and young adulthood. A number of reasons for the instability of childhood global self-esteem were proposed; including that young children do not fully understand the meaning of questions of self-esteem scales so answer based on their current mood, and that they may lack the ability to conceptualise themselves as “*globally good or bad*” (p216) so base their responses on relatively transient feedback from others. This finding that has implications for the validity of assessments of self-esteem in children, with the authors warning that “*Quite simply, if self-esteem cannot be measured validly in early childhood, then stability and change in self-esteem cannot be assessed for this age group*” (p216). Although the participants in the present study were aged 8-10 years and can therefore be considered to be in middle childhood rather than early childhood, the findings of

Trzesniewski *et al*'s comprehensive meta-analysis casts some doubt over whether global self-esteem in children can be expected to change over time or not and, if it is observed to change, whether the change is attributable to external variables (such as intervention) or simply increasing maturity.

In addition to this, Harter (2006) reports recent work by herself (Harter 2004, 1999) and DuBois (2002) that further challenges the perceived stability of self-esteem. These studies present evidence that, for some people, self-esteem is “trait-like” and stable over time, whereas for others it is “state-like” and varies either over time or between situations. However as these studies all appear to have been conducted on adolescents it is possible that the self-esteem of participants was still becoming established so was consequently less stable.

These findings may help to explain the unusual pattern of results in this study. Given the apparent instability of self-esteem when measured in children and adolescents, perhaps it was simply too ambitious to hope to find clear-cut changes in their scores over time, particularly over just a few months.

5.1.3 A third hypothesis

An alternative explanation of the pattern could be that guided imagery intervention simply encouraged participants in the experimental condition to reflect on themselves in a way that they had not previously been able to, and made them more aware of issues relating to their self-perception and how others perceive them. This could have led to them giving more reflective, considered answers to the Lawseq questions at post-testing than the control participants, who may have continued to give more socially desirable responses. Qualitative feedback reflecting increased resilience (*“If someone says something bad to me I try not to answer back”* – participant B526), increased self-confidence (*“These sessions have helped*

me to talk a bit louder” – participant B524), and more positive affect (*“It maked me happy”* – participant A523) -- although small in scale – lends some support to this hypothesis, and suggests that the intervention could have impacted upon self-esteem but just perhaps not at a level measurable by the Lawseq. This issue will be revisited later in this chapter.

5.2 To what extent can guided imagery reduce the social exclusion of children in Key Stage 2?

5.2.1 Review and discussion of key findings in relation to existing literature

The social inclusion of each participant was assessed using two instruments – the SIS (Frederickson & Furnham, 1999) which was completed by their peers, and two subscales of the SDQ (Goodman, 1997), Peer Problems and Prosocial Behaviour, which was completed by group facilitators. The main results in relation to each of these instruments are discussed below.

5.2.1.1 - Social Inclusion Survey: How happy would classmates be to work and play with each participant, either when the participant was the same sex as them or the opposite sex?

In summary, quantitative comparison of the SIS-Work(ss) data collected before and after the intervention showed that:

- *Increases in SIS-Work(ss) scores did not reach statistical significance for either the children who received the guided imagery intervention or the children who did not receive the intervention*

- *There was no significant difference in the gains made by participants in either condition*
- *The mean SIS-Work(ss) scores of participants of participants in both conditions were not significantly different at the end of the intervention*

From these results it can be concluded that ***the guided imagery intervention had no measurable effect on the extent to which participants were “accepted” by same-sex classmates when it came to choosing to work with them.*** The same pattern was found when considering the extent to which participants were accepted by the whole of the rest of their class:

- *Changes in SIS-Work(tot) scores did not reach statistical significance for either the children who received the guided imagery intervention or the children who did not receive the intervention*
- *There was no significant difference in the changes in mean score of participants in either condition*
- *The mean SIS-Work(tot) scores of participants of participants in both conditions were not significantly different at the end of the intervention*

The guided imagery intervention therefore appeared to have had no effect on how “attractive” participants were as work-partners, either to same-sex classmates or to classmates as a whole. The same pattern was evident when analysing the SIS-Play data.

Overall, then, these results would seem to indicate that taking part in the guided imagery intervention apparently had no measurable effect on how accepted participants were to their peers. This is supported by the observation that, unlike the pattern seen in self-esteem scores, the social inclusion scores of control participants mirrored those of participants who received the intervention. The

obvious conclusion would therefore be that the intervention simply had no measurable effect on the social inclusion of participants; however the content analysis of qualitative feedback showed that two participants reported feeling better accepted by peers. Although these two respondents represent only 10% of all experimental participants, a tentative alternative conclusion could be that the intervention *did* in some way help to enhance the social inclusion of participants, but these effects were not salient in the context of whole-class assessment.

The finding that the guided imagery intervention had very little effect on the social inclusion of participants therefore suggests that either the intervention did not effectively address issues of social inclusion, or that social status (as measured by the SIS) may actually be a relatively stable attribute that fluctuates around a “norm”. Both of these issues will be discussed in more detail later in this chapter.

5.2.1.2 - Strengths and Difficulties Questionnaire (Peer Problems): How well did group facilitators feel participants could socialise with peers?

Analysis of the SDQ data collected from group facilitators before and after the intervention showed that:

- *The decreases in Peer Problems scores reached statistical significance in both the children who received the guided imagery intervention and the children who did not receive the intervention*
- *The mean Peer Problems scores of participants in both conditions were significantly different at the end of the intervention*
- *However, there was no significant difference in the amount by which Peer Problems scores of participants in each group changed over the course of the intervention*

A decrease in Peer Problems score was a desirable outcome. The above results therefore indicate that the guided imagery intervention did have a positive effect on the extent to which the facilitators felt each experimental participant could socialise appropriately with peers; a result that was lent some support by the content analysis of the feedback received from some of the experimental participants (e.g. *"I have more playtime because not getting into trouble"* – participant B530). However, the same significant decrease was also seen in the control participants, and the fact that there was no significant difference in the changes made by experimental or control participants indicates that over the course of the intervention, ***all the participants appeared to show fewer problems in socialising with their peers***. In light of this it can be concluded that the guided imagery intervention alone had no measurable effect on the participants' abilities to socialise with others, and for some reason all of the participants appeared to make improvements in this area.

The reasons for this finding are difficult to establish without a detailed analysis of all the factors (within the participants themselves, their school contexts, and their families) that could possibly affect the participants' abilities to interact successfully with peers over the intervention period. One explanation could be that the children had simply matured sufficiently over the five-month period between pre- and post-intervention testing for a significant improvement to be seen in their ability to get on with peers. To investigate this further, it would have been helpful to gather qualitative data from facilitators and the control participants about the extent to which they felt control participants' ability to get on with their peers had changed over the intervention period; and to see whether this showed the same pattern as for experimental participants. Future replications of this study would benefit from the inclusion of this.

An alternative explanation for the finding that all participants became better able to get on with peers could be that the results actually reflected the participants'

responses to different interventions that were in place in each school. Given the current emphasis on the promotion of positive social behaviours in schools it is likely that each of the three schools was already implementing packages such as the SEAL materials (DfES, 2005), or using Circle Time techniques (Mosley, 1998/2004) in Key Stage 2. The improvements in Peer Problems scores seen in this study could therefore be more attributable to the positive impact of such interventions; this would fit with the assertion made by Barrett, Webster & Willis (1999) that young people are more likely to show increases in prosocial behaviour if they receive reinforcement from their peer group and the wider school system.

5.2.1.3 - Strengths and Difficulties Questionnaire (Prosocial Behaviour): To what extent did group facilitators feel participants displayed more socially acceptable behaviours?

Analysis of the SDQ data collected from group facilitators before and after the intervention showed that:

- *The increase in Prosocial Behaviour scores was not statistically significant either for children who received the intervention or for children who did not receive the intervention.*
- *The mean Prosocial Behaviour scores of participants of participants in both conditions were not significantly different at the end of the intervention*
- *There was no significant difference in the amount by which SIS-Work(ss) scores of participants in each group changed over the course of the intervention*

These results suggest that ***the guided imagery intervention had no measurable effect on the extent to which participants were judged by facilitators to display positive behaviours towards peers*** (such as active listening or being helpful). This finding supports the earlier indications that the intervention had no effect on how accepted participants were by their peers (as assessed by the SIS-Work and SIS-Play

scores); as children who struggle to display appropriate social behaviours would not be expected to receive favourable acceptance ratings from their peers (c.f. Ledingham & Schwartzman, 1984; Putallaz & Gottman, 1981; Coie & Cillessen, 1993; Coie *et al*, 1982; McGuire, 1973; Egan & Perry, 1998).

Interestingly, however, content analysis of the qualitative feedback received by some of the experimental participants indicated that they reported feeling better able to display prosocial behaviours (e.g. *"It helped me looking after everybody. If they fall out I will sort them out"* – participant B525). The fact that the facilitators did not explicitly support this in their observations suggests that the intervention could have been effective in enhancing participants' feelings of competence in this area, but not to a degree evident to outsiders. However, if this is true – and it must be noted that this is a tentative hypothesis based on qualitative feedback from only 9 of the 21 experimental participants – then it is likely that increases would also be noted in participants' global self-esteem, in line with the composite model of self-esteem proposed by Mruk (1999), and this was not evident. Perhaps a more in-depth assessment of self-esteem in different domains, such as social self-esteem, would have identified whether participants did feel more competent in displaying prosocial behaviours as a result of the guided imagery intervention.

5.3 Effect sizes: Which variables did the guided imagery intervention have the biggest effect on?

Of all the variables investigated in this study, ***the guided imagery intervention had the biggest effect on self-esteem***. However, in retrospect it is likely that this effect reflected the significant increases in Lawseq scores of the children who did not

receive the intervention (in comparison to the relative stability of the scores of the children who received the intervention).

The guided imagery intervention had a medium-sized effect on Prosocial Behaviour scores, but on closer inspection the scores of both the intervention and control participants remained relatively stable and did not change enough to be considered statistically significant. The size of the effect of the guided imagery intervention on all the other variables was either small or negligible, which supports the findings discussed above that any changes that were found in self-esteem or social inclusion scores were statistically insignificant.

5.4 Summary of findings in relation to the two main research questions

The guided imagery intervention used in this study appears to have had very little measurable impact upon either the self-esteem or social inclusion scores of the Year 4 and 5 children who took part. This finding is disappointing but it must be pointed out that these results reflect only the *measured* changes in self-esteem and social inclusion as assessed using the Lawseq, SIS and SDQ; and the content analysis, although limited in its power, indicates some more positive effects on social self-esteem and participants' abilities to interact appropriately with peers. Therefore, it is possible that the guided imagery intervention could have had some positive effect on self-esteem and social inclusion, but that these changes were more at the level of sub-domains and so not always measurable by the "global" assessment instruments used.

5.5 To what extent are the self-esteem and social inclusion of children in Key Stage 2 associated?

5.5.1 Review and discussion of key findings in relation to existing literature

Prior to the intervention period, Lawseq scores were weakly correlated with each of the social inclusion variables and none of these relationships reached statistical significance at the .05 level. The same pattern was found when analysing the data collected after the intervention. It can therefore be concluded that, in this study, there was actually very little association between self-esteem and social inclusion; the participants' relatively low Lawseq scores did not necessarily predict their scores on the SIS or the SDQ.

This finding contrasts with the wide body of literature that suggests that the two attributes are positively associated with each other. A number of studies have found that people who are high in self-esteem tend to also tend to be more socially included, although as previously discussed, it is almost impossible to establish whether one "causes" the other. One body of research argues that low self-esteem can create the conditions necessary for social exclusion – for example shyness and social withdrawal (e.g. Cavell, 1990; McFarlane *et al*, 1995), inability to express pro-social behaviour (e.g. Bandura, 1986; Blonk *et al*, 1996; Jupp & Griffiths, 1990), acceptance of negative feedback (Blaine & Crocker, 1993; De La Ronde & Swann, 1993; Tice, 1993) – whilst on the other hand it is argued that social exclusion can contribute to an individual's low self-esteem (e.g. Olweus, 1992; Boivin *et al*, 1994; Egan & Perry, 1998). These hypotheses have been extended into the low self-esteem hypothesis (Donnellan *et al*, 2005; Fergusson *et al*, 2002; Gjerde *et al*, 1988) and the defensive self-esteem hypothesis (Branden, 1969; Mruk, 1999), which suggest that aggression and anti-social behaviour are an expression of the

individual's low self-esteem, or emerge when the individual's high self-esteem is disputed or threatened by others (Diamantopoulou *et al*, 2008).

Providing some sort of compromise, Egan & Perry's (1998) proposal that "...*low self-regard and abusive treatment by others are mutually reinforcing*" (p307) provides a possible synthesis of the arguments for both directions of causality, and also validates the argument that any intervention which actually enhances either self-esteem or social inclusion – such as the guided imagery intervention used in this study – should be embraced.

One explanation for why the findings of this study do not tally with those of previous research may be that whereas the Lawseq was completed by the participants themselves, the SIS was completed by peers and the SDQ was completed by facilitators. It may therefore not have been valid to compare the different variables with each other, as each method of completion was vulnerable to threats and may therefore not have given a valid result. For example, a child may have felt the need to give socially desirable answers to questions about his self-esteem (cf. Brinthaupt & Erwin, 1992; Blascovich & Tomaka, 1991), which would have affected his Lawseq score; he may have been a newer member of the class and therefore less familiar to peers, which would have affected his SIS scores; and the group facilitator may have been basing their perceptions of his social competence on a limited number of interactions with him, which would have affected his SDQ scores. Unless for some reason a child was particularly in or out of favour on the days the SIS were completed, the SIS may have had the highest level of construct validity of the three instruments, as it was completed by all of the child's classmates and was most likely to present a realistic assessment of their social status. It is therefore plausible that the scores yielded by each assessment were not valid representations of each construct at all, which could explain why Lawseq scores had no discernable relationship with any of the social inclusion variables. From the information presented above, it therefore appears that all the

difficulties in conceptualising and measuring self-esteem and social inclusion are as applicable to this study as they are to the countless other studies that have examined the concepts.

5.6 Review of Methodology

The methodology used in this study was an example of fixed design, where the structure of the data-gathering process, the intervention package and data analysis procedures were specified in advance. However this study was also an example of “real world” research because it took place outside a laboratory setting and in the context of an open system. As such it was subject to uncontrollable, external factors which may have affected the outcomes of the study. Elements of the design and implementation of this study will now be reviewed and analysed, to evaluate the effect they could have had on its outcomes.

5.6.1 Issues relating to assessment

5.6.1.1 - Validity and reliability of each measure

One important factor to consider is the construct validity of the three assessments tool used – the extent to which they measured the concepts of self-esteem and social inclusion.

In terms of the Lawseq, consideration must be paid to the theory surrounding the construct of self-esteem, and therefore the extent to which it can be measured at all. As evident in the literature discussed in Chapter 2, the concept of self-esteem has been subject to much debate, with differing views existing about what it represents and a resultant lack of common agreement about how it should be

understood (Tafarodi & Milne, 2002). Contemporary views suggest that, rather than self-esteem referring to the difference between a person's "ideal" self and their "actual" self (e.g. James, 1950; Burns, 1982) it should be represented by a composite model, where self-esteem refers to a combination of either self-worth and self-efficacy (e.g. Mruk, 1999; Miller & Moran, 2005) or self-liking and self-competence (Tafarodi & Milne, 2002). There also appears to be a view that "global" self-esteem can be analysed at the level of self-esteem in different areas (or domains; such as academic, physical, musical), with different domains being organised hierarchically (c.f. Shavelson *et al*, 1976).

Given the complexity of self-esteem as a construct and the difficulties in defining it, the construct validity of the **Lawseq** is therefore – like that of all self-esteem assessments – difficult to establish; particularly considering the result is based on responses to just twelve questions. However, Hart's (1985) finding that the Lawseq correlated strongly with the Coopersmith Self-Esteem Inventory (Coopersmith, 1967), another widely-used measure of self-esteem, lends support to the idea that the Lawseq may indeed fulfil its aim of "*...assist(ing) in the identification of children who may suffer from poor self-esteem*" (Lawrence, 1981, p249).

Like with self-esteem, the idea that social inclusion can be "measured" should also be treated with some caution. In the current study it is possible that the **SIS** did not provide a very reliable measure of how accepted participants were by their classmates, as any child may have received different ratings from their peers on different days. For example, the speed with which children fall out and make up with each other, or change their minds about who they prefer to work and play with, means that the ratings each child received may not have been very reliable; for example, a normally "popular" child may have fallen out of favour on one particular day, leading to a false score of "rejectedness". However, as the ratings reflected an average of the ratings given by all of their classmates, any day-to-day variations in ratings from particular classmates should have been cancelled out.

In addition to this, it has been noted (Erwin, 1993) that sociometric measures, of which the SIS is an example, reflect only the child's level of popularity and not the quality of their friendships. For example it is possible that a child can be very popular yet not feature as anyone's best friend, and a child who is judged to be neglected or rejected may actually have at least one person who they regard as a best friend and who thinks of them in the same way; indeed, Parker & Asher (1987) found this to be the case in at least half of children of low sociometric status. Erwin argues that, instead, sociometric measures could be improved by asking respondents to indicate who of their peers is disliked or rejected; although he acknowledges that there are "*...many potential ethical and practical problems*" associated with this (p228).

The final measure used in this study, the **SDQ**, was completed by facilitators about each participant. An advantage of using the SDQ rather than more lengthy behaviour checklists (such as the Child Behaviour Check List; Achenbach, 1991a) was that, despite its brevity, it has been found to have a satisfactory level of validity (e.g. Goodman & Scott, 1999) and a satisfactory level of internal consistency and test-retest stability (e.g. Goodman, 2001). However, as previously mentioned, at the time that the pre-intervention SDQs were completed, the facilitators may not have been familiar with each participant, meaning the scores they gave each child may have been a reflection of the child's class teachers' perception rather than the facilitators. As facilitators would then have become more familiar with each participant before the post-intervention SDQs were completed, the SDQ scores may not therefore be a reliable measure of each participant's behaviour.

The **questionnaire** used to gather qualitative feedback about the intervention had been designed by the researcher and was therefore not published or standardised. It had also not been piloted, as the original pilot of the guided imagery intervention reported by the researcher (2007, unpublished) did not incorporate a qualitative feedback procedure of this kind. Although the information gained from this

questionnaire helped to contextualise the results found from the quantitative data analysis, it is recognised that the feedback questionnaire could have been used to greater effect. For example, future replications of this study could ask more specific questions about the effect of the intervention on different aspects of self-esteem and social inclusion, to assess the impact of the intervention at the level of the sub-domain. Alternatively – or perhaps additionally – the questionnaire could be designed so that rather than referring specifically to the effects of the intervention, it simply asked about changes in self-esteem and social inclusion over the intervention period. This would enable control participants to answer the same questionnaire, which would allow further comparisons to be made between the self-esteem and social inclusion of participants in both conditions.

In summary, it is important to consider that this study only reflected changes in self-esteem and social inclusion as measured by the three published instruments discussed; and possible issues regarding the validity and reliability of each instrument have been acknowledged. The usefulness of the questionnaire was also limited by its design and the fact that it was only applicable to experimental participants and facilitators. Gersten *et al's* (2005) comment that “*Far too often, the weakest part of an intervention is the quality of the measures used to evaluate the impact of the intervention*” (p158) may therefore apply to this study, although issues surrounding the reliability and validity of assessment tools will be present in any experimental research. That said, it would have strengthened the present study to have measured each variable more thoroughly and, in the case of self-esteem, at the level of sub-domains. However it may be worth bearing in mind Blascowich & Tomaka’s conclusion (in Robinson, Shaver & Wrightsman, 1991) that “*Apparently, the perfect measure [of self-esteem] does not exist*” (p153).

5.6.2 Issues relating to the intervention

5.6.2.1 - Strength of experimental treatment

It was hoped that this guided imagery intervention would lead to measurable improvements in participants' self-esteem, and social inclusion. However, in evaluating this it is important to consider the extent to which the session content was relevant to this outcome.

To recap, each session contained the following material:

Session 1	<p><i>Using our imaginations</i></p> <p><i>After a game where children introduce themselves, group rules were established. Children then explored the concepts of imagination and relaxation, and experienced using guided imagery to imagine being a cat. Children shared their thoughts and feelings with the rest of the group.</i></p>
Session 2	<p><i>What makes me a special person?</i></p> <p><i>Using the idea of “famous people” as a starting point, children considered what it is that makes people special. They then used guided imagery to imagine being at a ceremony where different people in their lives gave them messages telling them why they were special.</i></p>
Session 3	<p><i>Being happy with myself!</i></p> <p><i>In this session, children explored the idea that no-one is perfect and everyone has things about themselves they would like to change, but that we have to learn to accept ourselves as we are. Using guided imagery, children imagined meeting a monster who said hurtful things to them; however they were able to “burst” the speech bubbles that contained the hurtful messages, and watch the monster get smaller and smaller until it disappeared.</i></p>
Session 4	<p><i>Being a good friend to others</i></p> <p><i>Children started by considering what qualities make a good friend or a bad friend, and then used guided imagery to be a “Friendship Fixer” – an invisible being who could freeze time and offer advice to children in the playground who were experiencing a problem with others.</i></p>
Session 5	<p><i>Being the best person I can be</i></p> <p><i>In this final session, children used guided imagery to imagine that everything in their life was going really well and that they were the best person version of themselves that they could be. They then considered some small things they could do to try and make this achievable.</i></p>

Table 25: Summary of the content of each guided imagery session

From this it can be seen that the purpose of Session 1 was to familiarise participants with the concept of “imagination” and the process of guided imagery; as such it did not directly address issues of self-esteem. Session 2, meanwhile, was very much relevant to self-esteem. Participants were led to visualise their strengths and achievements through the eyes of people who were close to them, and consider the reasons why they were special to others; tasks which aimed to boost their self-perception and give them time to reflect on themselves more objectively than they may have normally done. In terms of the multi-domained and hierarchical model of self-esteem proposed by Shavelson *et al* (1976), Session 2 can therefore be considered to target both “academic” and “non-academic” domains of self-concept; as participants may have evaluated themselves in terms of, for example, their academic achievements, their attributes as a friend or family member, or their physical abilities.

Sessions 3 and 4 were written with the aim of empowering participants to feel confident in the face of adversity, as it was felt that an increased sense of self-competence would have positive effects on overall self-esteem (as advocated by the composite model of self-esteem proposed by Mruk, 1999). These two sessions, which many participants reported finding the most enjoyable and valuable of the intervention, allowed participants to explore using two different ways of addressing problematic situations; firstly where they were criticised or teased by others, and secondly where they encountered problematic social situations with peers. However, whereas both sessions hoped to build feelings of self-efficacy and gave participants “coping strategies” and skills they could use in real life, Session 4 in particular may have actually had a consequential positive effect on the development of social skills rather than self-esteem *per se*. Nevertheless, if self-esteem and social inclusion have a mutually reinforcing effect on each other, as the literature would suggest (see Chapter 2), then the enhancing of participants’ social skills and their ability to maintain friendships is likely to enhance their self-esteem. Sessions 3 and 4 therefore, in the context of Shavelson *et al*’s (1976) model, appear

to target sub-areas of the participants' "social self-concept", specifically their relationships with peers and significant others.

Session 5 was written in a more solution-focused way, but with the aim of enabling participants to consider their preferred future and ways they could begin to achieve this. Like the preceding sessions it was designed to be empowering, helping participants to feel they had more control over their futures; but by encouraging them to then consider some small, achievable steps they could take towards their "goal", this session remained very much rooted in reality rather than fantasy. This final session is less easily linked to Shavelson *et al*'s (1976) hierarchal model as it does not specifically target participants' evaluation of themselves in specific situations or domains, however it did encourage participants to "take stock" of their current situation and hopefully enhance their feelings of self-efficacy. In this way it can be considered to contribute to participants' self-esteem at the global level.

In summary, therefore, the researcher feels that this guided imagery intervention can be considered to have aimed to "enhance self-esteem", although some sessions did this more saliently than others. As well as this, the intervention included elements of social skills training and aimed to build feelings of self-efficacy; both of which can contribute to the wider construct of self-esteem. However, because the intervention incorporated discussion activities as well as guided imagery, it is very difficult to judge the extent to which any effects of the intervention were due to the guided imagery itself rather than the discussion activities.

5.6.2.2 - Length of intervention

This guided imagery intervention was very short, consisting of just five hour-long sessions delivered over five weeks. This meant that the effects of a participant missing one or two sessions would be more significant than if the intervention was

much longer. Unfortunately no attendance records were kept during this study, meaning that it was impossible to eliminate the results of any poor-attenders from data analysis - replications of this study would therefore benefit from the tracking of participant attendance.

Although there is some evidence that guided imagery interventions in medical settings can be effective at four weeks, this effect size generally increases after five to seven weeks (Van Kuiken, 2004). An earlier meta-analysis conducted by Chandler, Lubeck & Fowler (1992) into the success of different social skills interventions supports this finding, establishing that the most successful interventions took place over 33 sessions, or about six school weeks of daily intervention. Although neither of these meta-analyses specifically investigated the success of guided imagery interventions in primary school settings, they give an idea of how long it can take for participants to begin to respond to interventions, and support the observation that this intervention was indeed very short.

In light of these findings regarding the strength of the experimental treatment, it seems ambitious to have hoped that this guided imagery intervention could lead to measurable effects on global self-esteem or social inclusion; if indeed self-esteem and social inclusion can respond to intervention at all. As is clear from the literature, both are very complex structures that are affected by an individual's entire life experience; so any intervention would have had to have been very powerful to be effective over such a short time. However, it is possible that a more lengthy guided imagery intervention package, for example delivered as daily sessions over a half term (as advocated by Chandler *et al*, 1992), would have had more observable effects. Mertens (2010) summarises this issue, stating "*It may not be reasonable to expect that clients' or students' learning, attitudes, self-concepts, or personalities can be affected by an experiment of short duration. If the study results do not show evidence that the treatment was successful, this may not mean that the approach is ineffective, but simply that it was not tried long enough*"

(p132). As guided imagery is still a relatively unresearched treatment, but one that is clearly very accessible and enjoyable for children of this age, this could be an area worthy of future investigation.

5.6.2.3 - Language demands of the intervention

It is acknowledged that this intervention placed quite high demands upon participants' receptive and expressive language skills, as well as their ability to self-reflect and to imagine things outside their own experience. Each of the three schools contained a high proportion of pupils who spoke English as an additional language, which could have affected participants' ability to access the session content; however the effects of this were limited slightly by the exclusion (at pre-testing) of any children who were very new to English or who had special educational needs significant enough to affect their ability to do so.

5.6.3 Issues relating to the delivery of the intervention

5.6.3.1 - Delivery and treatment fidelity

Although facilitators were given clear guidance on how to deliver the sessions, it was possible that facilitators could have inadvertently altered the content of the sessions, for example by asking different questions or elaborating the content of the guided imagery. It was therefore important to consider the fidelity of the treatment and the extent to which the intervention was consistent across settings, as treatment fidelity *"...can clearly moderate the effectiveness of an intervention"* (Harrist & Bradley, 2003, p 198). In this study, a one-off observation was conducted by the researcher to assess how well one of the facilitators "followed the script" of a session; an attempt was made to assess treatment fidelity. The results of this were very positive, indicating that the facilitator delivered the session almost exactly as prescribed. Ideally, however, the same observation schedule would have been used to assess fidelity in each school and for each facilitator, through regular observations across the course of the whole study, and preferably including a

measure of inter-observer reliability (Gersten *et al*, 2005). This would have eliminated the need to rely upon self-report by each facilitator to ensure the sessions were delivered consistently across settings.

To further enhance the consistency with which the intervention was delivered, future replications of this study could also use a pre-recorded CD of the scripted guided imagery section of each session. This would ensure that that part of each session is delivered in exactly the same way across settings, therefore further increasing treatment fidelity.

5.7 Review of the internal validity of the study

As discussed in the methodology section of this study, researchers working in real world contexts should try to control as far as possible for the effects of a number of “threats” to the validity of their studies, so that any observed effects can be attributed more reliably to the intervention rather than other extraneous variables. In this study, which involved the random allocation of participants to the experimental or control group and a pre-test post-test design, two of the major threats to validity are maturation and history, as well as the interaction of pre-testing and treatment (Dimitrov & Rumrill, 2003). Because there was a five month gap between pre- and post-testing, it is possible that the biological and psychological characteristics of participants changed enough to affect their post-test scores; in which case **maturation** may threaten the validity of these results. However, as discussed above, there were very few significant differences between the experimental and control groups at either pre- or post-testing, so it can be assumed that all the participants matured at a similar rate.

The effects of *history* may be more difficult to disentangle. Only one participant was reported to experience a significant life-event during the course of the study, (involving the imprisonment of a close family member); however, unfortunately he was absent from the post-intervention testing session so it was not possible to compare his pre- and post-test scores. Apart from this information, which was reported informally to the researcher by a group facilitator, no information was collected about the life events of participants, meaning that the effects of history are not clear in this study. If the study were to be replicated then this information would be worth gathering.

The third major threat to validity highlighted by Dimitrov & Rumrill (2003) is that of the *interaction between pre-testing and treatment*; where the pre-intervention assessment sensitises participants so that they respond differently to the intervention than they would do otherwise. This could help account for the interesting results seen in the Lawseq scores of control and experimental participants. If completing the pre-intervention Lawseq had made experimental participants more aware of issues to do with self-esteem and how they view themselves, then they may – despite enjoying the sessions – have felt targeted for the intervention because of their responses. This could have temporarily have prevented their self-esteem scores increasing to the same extent as those of control participants, as they may have felt there was something “wrong” with them. The completion of pre-intervention assessments could therefore have interacted with the treatment itself and threatened the internal validity of this study, however given the long gap between pre-testing and the beginning of the intervention (approximately 2-3 months) this is unlikely and very difficult to quantify.

Feedback from facilitators mentioned that the experimental group participants were very excited about the guided imagery intervention, to the extent that the facilitator in one of the schools reported that control group participants kept asking

when it was their turn to take part. It is therefore quite safe to assume that some of the experimental group participants discussed the content of the sessions with their friends, thus making *treatment diffusion* a further factor that threatened the internal validity of this study. Whilst it would have been unfair to expect participants not to discuss the sessions with their friends, the researcher realises that replications of the study would need to alert facilitators to the need to preserve the integrity of the treatment as far as possible – possibly by running an alternative intervention alongside the experimental treatment (therefore reducing the “novelty value” of the guided imagery) or by asking children to keep their discussions about the sessions to a minimum.

A further factor that posed a threat to internal validity was that of *instrumentation*. As previously discussed, there are issues surrounding the reliability of self-report measures, meaning that the self-esteem scores of participants should be regarded with some caution. However in addition to this, the completion of the SDQ by facilitators needs some attention. In some cases, the group facilitators were relatively unfamiliar with participants prior to the intervention and may have completed the SDQ in conjunction with the child’s class teacher, who knew the child well. However, by the time post-test SDQs were completed, facilitators would have become more familiar with each child and would perhaps then have been able to provide a more accurate assessment of their abilities to interact positively with peers. The reliability of the SDQ scores, particularly the pre-test scores, is therefore questionable.

One way that the threat of instrumentation could have been reduced would have been to run the intervention later in the school year, when class teachers would know each child well and could have completed the SDQ instead of the group facilitators. Additionally, parents and participants could have been asked to complete the parent’s and children’s versions of the SDQ, which would have allowed for triangulation of results. Indeed, correlations amongst SDQs completed

by parents, teachers and children have generally been found to be moderate and more favourable than those gained from other similar measures (Goodman, 1997; Goodman, 2001; Goodman *et al*, 1998), which would support this.

5.8 Review of the external validity of this study

This study involved 46 participants and four different facilitators, across three schools in an urban district of northern England. As such the results can only be generalised to children of the same age and in similar socio-economic circumstances, and with caution. The acknowledged limitations of the study also mean that findings may not be representative of the “true” effects of the intervention, and replications of this study could have different results.

5.9 Limitations of data analysis

The data analysis conducted in this study was representative of 22 boys and 24 girls, from two different year groups in three different schools. Given wider time parameters it would have been interesting and valuable to see whether the intervention affected the self-esteem or social inclusion of children differently depending on their sex, year group, school, or which facilitator ran the sessions. The ethnicity or first language status of each participant could have also been investigated as additional factors that could have affected the participants’ responses to the intervention, had data been gathered about these factors. Within the time available and the generality of the three research questions, however, a

decision was made to analyse the sample as a whole rather than to begin breaking it down into smaller subcomponents. Keeping the sample size as large as possible also had the benefit of maximising the likelihood of finding a significant effect if one existed, therefore increasing the confidence with which any significant effects could be attributed to the effect of the intervention rather than to sampling error. This power would have been further increased if all six intervention and control groups had taken place as planned.

5.10 Review and discussion of ethical considerations

As noted in Chapter 3, a researcher always has a moral and professional obligation to conduct ethically-sound research. This study was therefore planned and carried out in accordance with the British Psychological Society's *Code of Ethics and Conduct* (BPS, 2006) and *Guidelines for Minimum Standards of Ethical Approval in Psychological Research* (BPS, 2004).

As intended, informed consent was obtained from the parents of each participant both before the screening session and before the intervention began, by means of letters written by the researcher and authorised by the Headteacher of each school (see Appendices 4 and 8). This ensured that parents understood the nature of the screening and intervention, and that they were aware of their right to withdraw their child at any point. Informed consent was also obtained from the participants themselves, firstly by having given them the option to withdraw from the pre-intervention screening activities, and then at the beginning of the first session by asking participants to sign a declaration (see Appendix 13) that reiterated their rights to withdrawal and confidentiality. This form had been written in age-appropriate, accessible language (as advocated by Vargas & Montoya, 2009) and was explained verbally by facilitators.

After the intervention period, the researcher supported schools to deliver the intervention to participants who had been on the waiting list control group, as these children had been identified as having similarly “low” self-esteem to the children in the experimental groups. Facilitators retained the skills and resources to be able to deliver the intervention at a later date, and have delivered the intervention to both the Year 4 and 5 waiting list control groups in School B. In Schools A and C, staffing and timetabling constraints have meant that facilitators have not yet been able to do this, however the researcher retains her links with both schools so will continue to attempt to ensure that this occurs.

As planned, all data was made anonymous, stored securely, and kept confidential. The researcher was not made aware of any child protection issues that had arisen during the course of the study.

One further ethical issue arose from data analysis but has since been resolved. The discovery that participants in the control group had made significant gains in self-esteem but that experimental participants had not, gave rise to the question of whether the guided imagery intervention had in some way been “damaging” to the normal development of the experimental participants’ self-esteem. If this had been felt to be the case then there would have been implications for the delivery of the intervention to the waiting list controls, and implications for the future promotion of the intervention package as a resource. However, in light of literature suggesting that self-esteem of children of this age is generally unstable, and the positive qualitative feedback received from experimental participants, the researcher now feels that – although no significant gains in self-esteem were made by experimental participants – the intervention was also not damaging. Instead, it is felt that the intervention simply encouraged them to think about and address issues of self-esteem in a way they had not done before, which led to them giving more honest appraisals of themselves at post-testing.

5.11 Discussion of the implications of this study for future research and practice

The quantitative data analysis procedures used in this study indicated that the guided imagery intervention apparently had little effect on the global self-esteem on participants, and little effect on the extent to which they were regarded as “accepted” by their peers. However, more positive findings were yielded by the content analysis of qualitative data received from participants and facilitators (although limited in power), which indicated that positive effects were found at the sub-domain level of self-esteem and social inclusion. Taken together, these findings suggest either a) that the intervention had some positive effects on self-esteem and social inclusion but that these were not measurable by the three instruments used, or b) that there were indeed no real effects of the intervention and that the feedback questionnaire elicited “false” results. Future research could therefore apply the following measures, discussed above, to increase the confidence with which conclusions could be drawn:

- gathering qualitative data from both control and experimental participants
- extending the length of the intervention package
- further assessing treatment fidelity
- logging any significant life events that may have affected the participants’ self-esteem or social inclusion
- introducing an “alternative treatment” condition
- tracking attendance of participants to the sessions
- running the intervention later in the year when facilitators or teachers were more familiar with the children
- triangulating data by using the parent and child versions of the SDQ alongside the teacher version
- measuring self-esteem and social inclusion more thoroughly and, in the case of self-esteem, at the level of sub-domains
- making the feedback questionnaire more specific, and

- analysing data in more detail to investigate the effects of the intervention in different contexts, and on different sexes and ages.

At a practical, methodological level, a study that included these measures would build upon the foundation laid by the present study, allowing the research questions to be answered with more confidence. This could be further enhanced by the provision of follow-up assessments, which would help to assess the longer-term effects of the package on self-esteem and social inclusion; although follow-up assessments would need to consider the additional confounding effects of factors such as maturation, changes in circumstance, and life-events.

Notwithstanding these methodological issues, debate still remains at the theoretical level about the value of interventions that attempt to enhance self-esteem and indeed whether there is any point in enhancing it at all (Mruk, 1999). For example, Cigman (2008) berates what she calls the “*absurd social vaccine view*” that by raising the self-esteem of a population, “*...we all become happier, safer and more productive overnight*” (p549), and Kristjansson (2007) refers to a “*...blissfully sunny optimism that all kinds of psychological, social and educational hindrances will automatically fall by the wayside if simple measures are taken to ‘boost’ self-esteem*” (p257). However, these opinions assume that high global self-esteem is associated with a whole array of positive outcomes such as academic achievement, positive behaviour and emotional well-being; which literature suggests may not be the case. Rather, it appears that an individual’s performance in a given domain is more likely to be enhanced by enhancing their self-esteem in that particular sub-domain (e.g. Harter, 1983, 1993; Muijs, 1997); therefore perhaps future interventions should aim to enhance self-esteem at a sub-domain level rather than at a general level.

Given the lack of robust evidence of a link between global self-esteem and a range of different outcomes, Baumeister *et al* (2003) conclude that high self-esteem is perhaps more usefully conceptualised as a stock of positive feelings that can help promote resilience in different situations, therefore “buffering” the individual from negative effects (cf. Pyszczynski *et al*, 2004). The current guided imagery intervention can be seen as contributing to this buffer through its emphasis on celebrating the self (Session 2); the providing of strategies that participants can use in real life (Sessions 3 and 4); and its strong theme of empowerment (Sessions 3, 4 and 5). Future research could take any or all of these themes and expand upon them, to investigate the role that guided imagery could have in promoting resilience.

Aside from potential value of guided imagery in promoting resilience, the positive feedback received about the present intervention and the apparent scarcity of research into the effects of guided imagery suggests there is much scope for future research into the ways that it could be used within schools. Both the participants and group facilitators reported finding the intervention enjoyable and an unusual addition to the school curriculum, with “knock-on” effects observed in terms of, for example, the participants’ ability to generate ideas for story writing and enthusiasm for storytelling. The potential of guided imagery to support literacy development and speaking and listening skills could therefore be a focus for future research, particularly in terms of engaging children who find it difficult to engage with literacy activities. Similarly, guided imagery could be further investigated as a means of encouraging children to explore issues in a more focused and detailed way than traditional discussion activities; for example by being asked to imagine a particular scenario and its possible implications. This could be used across the curriculum, most obviously to support learning in lessons such as Citizenship.

Informal feedback from group facilitators also indicated that they valued the calming effect of guided imagery on participants, and felt that the repetition of the

relaxation routine across sessions helped the participants to quickly become receptive to the main imagery experience. The researcher feels that the relaxation element of the intervention has particular value in teaching children to regulate their physiological responses and become ready to engage with learning; this could be further explored as a way of working with all children but especially those with emotional and behaviour difficulties. Of course, following the same principle, guided imagery could potentially also be used with families and adults in schools to help them relax and explore hypothetical situations .

One further avenue for future research, and one of importance in terms of evaluating the effectiveness of guided imagery interventions, would be to investigate the extent to which the relaxation and discussion elements contribute to any observed effects. It was beyond the scope of the present study to do so, however the literature base would benefit from a deeper exploration of this, possibly by attempting to partial out the effects of these elements. Although it should be acknowledged that the relaxation and discussion activities are an integral part of a package such as this, it would be valuable to know more about the contribution they make – or do not make – to the effectiveness of such interventions.

The present study, which was an example of real world research, has some methodological limitations, and these have been addressed above. As such, any conclusions and generalisations should be made with caution and considered in the context of the open, dynamic system that the study took place within. However, despite this, the author feels that the study has succeeded in bringing fresh attention to the potential applications of guided imagery in education, and is excited about the ways that this could be developed in the future.

variables, meaning that change could be observed over time; and the use of guided imagery was consistent and formed a large part of each session, which increased the confidence with which any effects could be attributed to it. By addressing some of the methodological issues that had affected the studies identified during the systematic literature search, the present study can therefore be considered to have made a unique contribution to the small body of research that exists into the efficacy of guided imagery interventions in enhancing self-esteem and social inclusion.

This study also benefited from the analysis of both quantitative and qualitative data, which helped to present a more comprehensive picture of the effects of the guided imagery intervention. This fits with its epistemological positioning within the postpositivist paradigm, which asserts that the aim of research is to enhance the level of confidence with which claims about educational or psychological phenomena can be made. In this study, data analysis indicated that the intervention had few salient effects on any of the measures of self-esteem or social inclusion, but that both participants and facilitators reported noticing some perceived positive effects of the intervention on both constructs. This presents a mixed assessment of the impact of the intervention, but suggests some support for the notion that self-esteem and social inclusion may in future benefit more from being addressed and assessed at the level of sub-domains (such as social self-esteem and the ability to interact appropriately with peers) rather than from being addressed at a general, global level. Therefore, the present study can be considered to have made a small contribution to growing body of research into conceptual structure of self-esteem and social inclusion.

The absence of any evidence of a correlation between self-esteem and social inclusion in this study is not concurrent with the wider body of research into the relationship between the two variables. However, given the evidence from many other studies that there is a mutually reinforcing relationship between self-esteem

and social inclusion, it is felt that guided imagery – if used to enhance social self-esteem – could help to reduce social exclusion in children after all. Given the accessibility of guided imagery to children, and the scarcity of current research into its effectiveness as an intervention to enhance self-esteem or social inclusion, it is hoped that this study presents an argument for the continued investigation into the role that guided imagery could yet play in the enhancement of self-esteem and social inclusion in children.

References

Achterberg, J (1985). *Imagery in healing: Shamanism and modern medicine*. Boston: Shambhala.

Ader, R (1981). Psychosomatic and psychoimmunologic research. *Psychosomatic Medicine*, 42 (3), p307-321.

Adler, C. M., & Hillhouse, J. J (1996). Stress, health and immunity: A review of the literature. In T. W. Miller (Ed.), *Theory and assessment of stressful life events* (p109-138). Madison, WI: International Universities Press.

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed. Text revision). Washington, DC: Author.

Anderson, R. F (1980). Using guided fantasy with children. *Elementary School Guidance and Counseling*, 15 (1) p39-47.

Andrews, B (1998). Self-esteem. *The Psychologist*, 10, p329-342.

Anthony, E. J. (1974). Introduction: The syndrome of the psychologically vulnerable child. In E. J. Anthony & C. Koupernik (Eds.), *The child in his family: Children at Psychiatric Risk*; Vol. 3, p 3–10. New York: Wiley.

Arbuthnott, K. D., Arbuthnott, D. W., & Rossiter, L (2001). Guided imagery and memory: Implications for psychotherapists. *Journal of Counselling Psychology*, 48 (2), p123-132.

Arndt, J., & Goldenberg, J. L (2002). From threat to sweat: The role of physiological arousal in the motivation to maintain self-esteem. In A. Tesser, D. A. Stapel & J. V. Wood (Eds.), *Self and motivation: Emerging psychological perspectives* (p43-69). Washington, DC: American Psychological Association.

Asher, S. R (1990). Recent advances in the study of peer rejection. In Asher, S. R., & Coie, J. D. *Peer rejection in childhood*. Cambridge University Press.

Asher, S. R., & Wheeler, V. A (1985). Children's loneliness: A comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology*, p53, p55-505.

Asher, S. R., & Coie, J (1990). *Peer rejection in childhood*. Cambridge, UK, Cambridge University Press.

Assagioli, R (1980). *The act of will*. New York: Penguin.

Bachman, J. G., & O'Malley, P. M (1977). Self-esteem in young men: A longitudinal analysis of the impact of educational attainment. *Journal of Personality and Social Psychology*, 35, p365-380.

Bagwell, C. L., Newcomb, A. F., & Bukowski, W. M (1998). Preadolescent friendship and peer rejection as predictors of adult adjustment. *Child Development*, 69, p140-153.

Bandura, A (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4, p359-373.

Bandura, A (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman & Co.

Barrett, P, M., Webster, H. M., & Willis, J. R (1999). Adolescent self-esteem and cognitive skills training: a school based intervention. *Journal of Child and Family Studies*, 8 (2), p217-227.

Barrett, W., & Randall, L (2004). Investigating the Circle of Friends approach: adaptations and implications for future practice. *Educational Psychology in Practice*, 20 (4), p353-368.

Battle, J (1981). *Culture free self-esteem inventories for children and adults*. Seattle: Special Child Publications.

Baum, A., Herbman, H., & Cohen, L (1995). Managing stress and managing illness: Survival and quality of life in chronic disease. *Journal of Clinical Psychology in Medical Settings*, 2, p309-333.

Baumeister, R. F (1991). *Meanings of life*. New York: Guilford Press.

Baumeister, R. F (1993). *Self-esteem: The puzzle of self-regard*. New York: Plenum Press.

Baumeister, R. F., Bushman, B. J., & Campbell, W. K (2000). Self-esteem, narcissism, and aggression: Does violence result from low self-esteem or from threatened egotism? *Current Directions in Psychological Science*, 9, p26-29.

Baumeister, R. F., Campbell, J. D., Kreuger, J. I., & Vohs, K. D (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4 (1), p1-44.

Baumeister, R. F., & Leary, M. R (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117 (3), p497-529.

Baumeister, R. F., Smart, L., & Boden, J. M (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review*, 103, p5-33.

Baumeister, R. F., Tice, D. M., & Hutton, D. G (1989). Self-presentational motivations and personality differences in self-esteem. *Journal of Personality*, 57, p547-579.

Berkovitz, S (2000). *Guided imagery with children: Successful techniques to improve school performance and self-esteem*. Whole Person Associates.

Bierman, K. L (2004). *Peer rejection: Developmental processes and intervention strategies*. New York: Guilford Press.

Bierman, K. L., Smoot, D. L., & Aumiller, K. A (1987). *Distinguishing characteristics of aggressive-rejected, aggressive (non-rejected) and rejected (non-aggressive) boys*. Paper presented at the biennial meeting of the Society for Research in Child Development, Baltimore, MD .

Bigelow, B. J., & LaGaipa, J. J (1980). Children's written descriptions of friendship: A multidimensional analysis. *Developmental Psychology*, 11, p857-858.

Bjorkqvist, , K (1994). Sex differences in physical, verbal, and indirect aggression: A review of recent research. *Sex Roles*, 30, p177-188.

Bjorkqvist, K., Lagerspetz, K., & Kaukiainen, A (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behaviour*, 18, p117-127.

Blaine, B., & Crocker, J (1993). Self-esteem and self-serving biases in reactions to positive and negative events: An integrative review. In R. F. Baumeister (Ed.). *Self-esteem: The puzzle of low self-regard* (p55-86). New York: Plenum.

Blascovich, J., & Tomaka, J (1991). Measures of self-esteem. In J. Robinson, P. Shaver & L. Wrightsman (Eds.). *Measures of personality and social psychological attitudes* (p115-160). San Diego, CA: Academic Press.

Blonk, R. W. B., Prins, P. J. M., Sergeant, J. A., & Ringrose, J (1996). Cognitive behavioural group therapy for socially incompetent children: short term and maintenance effects with a clinical sample. *Journal of Clinical Child Psychology*, 25, p215-224.

Bowlby, J (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.

Bowlby, J (1973). *Attachment and loss: Vol. 2. Separation anxiety and anger*. New York: Basic Books.

Bowles, T (1999). Focusing on time orientation to explain adolescent self concept and academic achievement: Part 2. Testing a model. *Journal of Applied Health Behaviour*, 1, p1-8.

Boxall, M., & Lucas, S (2010). *Nurture groups in schools: Principles and practice*. Sage Publications.

Bracht, H. G., & Glass, V. G (1968). The external validity of experiments. *American Education Research Journal*, 5, p437-474.

Brigham, D. D (1994). *Imagery for getting well: Clinical applications of behavioral medicine*. New York: Norton

Brinthaupt, T., & Erwin, J (1992). *The self: Definitional and methodological issues. SUNY Series, Studying the Self.*

British Psychological Society (2004). *Guidelines for Minimum Standards of Ethical Approval in Psychological Research.* British Psychological Society Press.

British Psychological Society (2006). *Code of Ethics and Conduct.* British Psychological Society Press.

Bryman, A (1988a). *Quality and quantity in social research.* London: Unwin Hyman.

Burns, R. B (1982). *Self-concept development and education.* Cassell.

Burns, R. B (1997b). *Self-concept Development and Education.* Holt, Rinehart & Winston, Sydney.

Bushman, B.J ., & Baumeister, R. F (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology*, 75, p219-229.

Bynner, J (2001). Childhood risks and protective factors in social exclusion. *Children and Society*, 15, p285-301.

Byrne, B (1986). Self-concept/academic relations; an investigation of dimensionality, stability and causality. *Canadian Journal of Behavioral Science*, 18 (2), p173-186.

Byrne, B., & Shavelson, R (1996). On the structure of social self-concept for pre-, early and late adolescents: a test of the Shavelson, Hubner and Stanton (1976) model. *Journal of Personality and Social Psychology*, 70, p599-613.

Cairns, R. B., Cairns, B. D., Neckerman, H. J., Ferguson, L. L., & Gariepy, J (1989). Growth and aggression: 1. Childhood to early adolescence. *Developmental Psychology*, 25, p320-330

Campbell, D. T., & Stanley, J. C (1963). Experimental and quasi-experimental designs for research on teaching. In N. L. Gage (Ed.), *Handbook of research and teaching* (p171-246). Chicago: Rand McNally.

Carey, M. P., & Burish, T. G (1988). Etiology and treatment of the psychological side-effects associated with cancer chemotherapy: A critical review and discussion. *Psychological Bulletin*, 104, p307-325.

Cavell, T. A (1990), Social adjustment, social performance, and social skills: A tri-component model of social competence. *Journal of Clinical and Child Psychology*, 19, p111-121.

Chandler, L. K., Lubeck, R. C., & Fowler, S. A (1992). Generalization and maintenance of preschool children's social skills: A critical review and analysis. *Journal of Applied Behavior Analysis*, 25, p415-428.

Chevreau, M (1993). Guided fantasy: unlocking the academic self-concept. *Educational Psychology in Practice*, 8 (4), p215-221.

Cicchetti, D., & Rogosch, F. A. (2009). Adaptive coping under conditions of extreme stress: Multilevel influences on the determinants of resilience in maltreated children. In E. A. Skinner & M. J. Zimmer-Gembeck (Eds.), *Coping and the development of regulation. New Directions for Child and Adolescent Development*, 124, p47–59. San Francisco: Jossey-Bass.

Cigman, R (2004). Situated self-esteem. *Journal of Philosophy of Education*, 38 (1), p91-105.

Cigman, R (2005). Enhancing children. *Journal of Philosophy of Education*, 42 (3-4), p539-557.

Clegg, J. W., & Slife, B. D (2009). Research ethics in the postmodern context. In D. M. Mertens & P. E. Gisberg (Eds), *The handbook of social research ethics*(p23-38). Thousand Oaks, CA: Sage.

Cohen, J (1988). *Statistical power analysis for the behavioural sciences* (2nd edition). Hillsdale, NJ: Erlbaum.

Coie, J. D., & Cillessen, A. H. N (1993). Peer rejection: Origins and effects on children's development. *Current Directions in Psychological Science*, 2, p89-92.

Coie, J. D., Dodge, K. A., & Coppotelli, H (1982). Dimensions and types of social status: A cross-age perspective. *Developmental Psychology*, 18, P557-570.

Coie, J. D., & Kupersmidt, J. B (1983). A behavioral analysis of emerging social status in boys' groups. *Child Development*, 54, p1400-1416.

Coie, J. D., Terry, R., Lenox, K., Lochman, J., & Hyman, C (1995). Childhood peer rejection and aggression as predictors of stable patterns of adolescent disorder. *Development and Psychopathology*, 7, p697-713.

Colalillo-Kates, I (1989). Dreamjourneys: using guided imagery and transformational fantasy with children. In J. Shorr (Ed.), *Imagery: Current Perspectives*. New York: Plenum Press.

Cole, D. A., & Carpentieri, S (1990). Social status and the comorbidity of child depression and conduct disorder. *Journal of Consulting and Clinical Psychology*, 58, p748-757.

Cook, T. D., & Campbell, D. T (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Chicago: Rand McNally.

Coolican, H (2009). *Research methods and statistics in psychology (5th edition)*. London: Hodder Education.

Coopersmith, S (1967). *The Antecedents of Self-Esteem*. San Francisco, CO, Freeman.

Corning, A. F (2002). Self-esteem as a moderator between perceived discrimination and psychological distress among women. *Journal of Counselling Psychology*, 49, p117-126.

Corsaro, W, A (1981). Friendship in the nursery school: Social organization in a peer environment. In S. R. Asher & J. M. Gottman (Eds.), *The development of children's friendships*, p207-241, New York: Cambridge University Press.

Cowen, E., Pederson, A., Babigan, H., Izzo, L., & Trost, M (1973). Longterm follow-up of early detected vulnerable children. *Journal of Consulting and Clinical Psychology*, 41, 438-446.

Crick, N. R., & Grotpeter, J. K (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, 66, p710-722

Crick, N. R., Wellman, N. E., Casas, J. F., O'Brien, M. A., Nelson, D. A., & Grotpeter, J. K (1999). Childhood aggression and gender: A new look at an old problem. In D. Bernstein (Ed.), *Nebraska Symposium on Motivation*, (p75-140). Lincoln: University of Nebraska Press.

Crocker, J., & Wolfe, C. T (2001). Contingencies of self-worth. *Psychological Review*, 108 (3), p593-623.

Cronenbach, L. J., & Meehl, P. E (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52, p281-302.

Dancey, C. P., & Reidy, J (2002). *Statistics without maths for psychology* (2nd ed). Harlow: Prentice Hall.

Davies, J., & Bremner, J (1999). Reading and mathematics attainments and self-esteem in Years 2 and 6 – an eight year cross-sectional study. *Educational Studies*, 25 (2), p145-157.

De La Ronde, C., & Swann, W. B (1993). Caught in the crossfire: Positivity and self-verification strivings among people with low self-esteem. In R. F. Baumeister (Ed.), *Self-esteem: The puzzle of low self-regard*, p147-166. New York: Plenum.

DeLongis, A., Folkman, S., & Lazarus, R. S (1988). The impact of daily stress on health and mood: Psychological and social resources as mediators. *Journal of Personality and Social Psychology*, 54, p486-495.

Denis, M (1985). Visual imagery and the use of mental practice in the development of motor skills. *Canadian Journal of Applied Sport Sciences*, 10, p4-16.

Department for Children, Schools and Families (DCSF) (2007), *The Children's Plan: building brighter futures*. London, DCSF Publications

Department for Education and Employment (DfEE), (1999). *Sure Start: Making a Difference for Children and Families*. London: DfEE Publications

- Department for Education and Skills (DfES) (2001). *Special Educational Needs: Code of Practice*. London: DfES Publications
- Department for Education and Skills (DfES) (2005). *Excellence and learning: Social and emotional aspects of learning*. Available at <http://www.standards.dfes.gov.uk/primary/publications/banda/seal>
- Department for Education and Skills (DfES) (2005). *Every Child Matters*. www.everychildmatters.gov.uk
- Department of Education and Science (DfES) (1978). *Special Educational Needs, Report of the Warnock Committee of Enquiry into the Education of Handicapped Children and Young People, Cmnd 7212*. London: HMSO
- Department of Trade and Industry (DTI) (1995). *Disability Discrimination Act*. London: HMSO.
- Der, D. F., & Lewington, P (1990). Rational self-directed hypnotherapy: A treatment for panic attacks. *American Journal of Clinical Hypnosis*, 32, p160-167.
- DeRosier, M. E., Kupersmidt, J. B., & Patterson, C. J (1994). Children's academic and behavioral adjustment as a function of the chronicity and proximity of peer rejection. *Child Development*, 65, p1799-1813.
- Diamantopoulou, S., Rydell, A., & Henricsson, L (2008). Can both low and high self-esteem be related to aggression in children? *Social Development*, 17 (3), p682-698.
- Diener, E., & Diener, M (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, 68, p653-663.
- Dimitrov, D., & Rumrill, P. D. Jr (2003). Pretest-posttest designs and measurement of change. *Speaking of Research*
- Dinkmeyer, D., & Dinkmeyer, D, Jr (1982). *Developing understanding of self and others, DUSO-2 (revised)*. Circle Pines, MN: American Guidance Service.
- Dodge, 1983, K. A (1983). Behavioral antecedents of peer social status. *Child Development*, 47, p400-413.

Dodge, K. A (1986). A social information processing model of social competence in children. In M. Perlmutter (Ed.). *Minnesota symposia on child psychology*, 18, p77-126. Hillsdale, NJ: Lawrence Erlbaum.

Dodge, K. A., Coie, J. D., & Brakke, N. D (1982). Behavior patterns of socially rejected and neglected preadolescents: The roles of social approach and aggression. *Journal of Abnormal*, 10, p389-409.

Donaldson, V. W (2000). A clinical study of visualisation on depressed white blood cell count in medical patients [electronic version]. *Applied Psychophysiology and Biofeedback*, 25, p117-128.

Donnellan, M. B., Trzesniewski, K. H., Robins, R., Moffitt, T. E., & Caspi, A (2005). Low self-esteem is related to aggression, antisocial behavior and delinquency. *Psychological Science*, 16, p328-335.

Egan, S. K., & Perry, D. G (1998). Does low self-regard invite victimization? *Developmental Psychology*, 34 (2), p299-309.

Eisenberger, N. I., & Lieberman, M. D (2004). Why rejection hurts: A common physical alarm system for physical and social pain. *Trends in Cognitive Sciences*, 8, p294-300

Eisenberger, N. I., Lieberman, M. D., & Williams, K. D (2003). Does rejection hurt? An fMRI study of social exclusion. *Science*, 302, p290-292.

Eller, L. S (1995). Effects of two cognitive-behavioral interventions on immunity and symptoms in persons with HIV. *Annals of Behavioral Medicine*, 17 (4), p339-347.

Eller, L. S (1999). Guided imagery interventions for symptom management. *Annual Review of Nursing Research*, 17, p57-84.

Ellis, S., Rogoff, B., & Cromer, C. C (1981). Age segregation in children's social interactions. *Developmental Psychology*, 17, p399-407.

Emler, N (2001) Self-esteem: *The costs and causes of low self-worth*. Report published by the Joseph Rowntree Foundation.

Epstein, R (2001). The prince of reason. *Psychology Today*, 34, p66-76.

Erwin, P (1993). *Friendships and peer relations in children*. UK: Wiley & Sons.

Espelage, D., & Swearer, S (2003). *Bullying in American schools: a social-ecological perspective in prevention and intervention*. Mahwah, NJ, Erlbaum,

Esplen, M. J., Garfinkel, P. E., Olmsted, M., Gallop, R. M., & Kennedy, S (1998). A randomized control trial of guided imagery in bulimia medicine. *Psychological medicine*, 28, p1347-1357.

Feltz, D. L., & Landers, D. M (1983). The effects of mental practice on motor skill learning and performance. A meta-analysis. *Journal of Sport Psychology*, 5, p25-57.

Fergusson, D. M., & Horwood, L. J (2002). Male and female offending trajectories. *Development and Psychopathology*, 14, p159-177.

Ferkany, M (2008). The educational importance of self-esteem. *Journal of Philosophy of Education*, 42 (1), p119-132.

Feuer, M. J., Towne, L., & Shavelson, R. J (2002). Scientific culture and educational research. *Educational Researcher*, 31 (4), p4-14.

Field, A (2000). *Discovering statistics using SPSS for Windows*. London: Sage Publications.

Fleming, J. S., & Courtney, B. E (1984). The dimensionality of self-esteem: Hierarchical facet model for revised measurement scales. *Journal of Personality and Social Psychology*, 46, p404-421.

France, N (1981). *The Primary Reading Test*. Windsor, NFER-Nelson.

Frederickson, N (1991). Children can be so cruel – Helping the rejected child. In G. Lindsay & A. Miller (Eds.), *Psychological services for primary schools*. Harlow, Essex: Longman.

Frederickson, N., & Cline, T. (2002). *Special educational needs, inclusion and diversity: a textbook*. Buckingham. Open University Press.

Frederickson, N. L., & Graham, B. (1999) *Social Skills and Emotional Intelligence*. Windsor: NFER-Nelson.

Freud, S (1930). *Civilization and its discontents* (J. Riviere, Trans.). London: Hogarth Press.

Furnham, A., & Cheng, H (2000). Lay theories of happiness. *Journal of Happiness Studies*, 1 (2), p227-246.

Gall, M. D., Gall, J. P., & Borg, W. R (2007). *Educational Research: An Introduction* (8th edition). Cranberry, NJ: Merrill.

Galyean, B (1983). Guided imagery in the curriculum. *Educational Leadership*, 40 (6), p54-58.

Gersten, R., Fuchs, L. S., Compton, D., Coyne, M., Greenwood, C., & Innocenti, M. S., (2005). Quality indicators for group experimental and quasi-experimental research in special education. *Exceptional Children*, 71 (2), p149-164.

Gjerde, P. F., Block, J., & Block, J. H (1988). Depressive symptoms and personality during late adolescence: Gender differences in the externalization-internalization of symptoms expression. *Journal of Abnormal Psychology*, 97, p475-486.

Glantz, M. D., & Johnson, J. (1999). *Resilience and development: Positive life adaptations*. New York: Plenum.

Goodman, R (1999). The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. *Journal of Child Psychology and Psychiatry*, 40, p791-799.

Goodman, R (2001). Psychometric properties of the Strengths and Difficulties Questionnaire. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, p1337-1345.

Goodman, R (1997). The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry*, 38, p581-586.

- Goodman, R., & Scott, S (1999). Comparing the Strengths and Difficulties Questionnaire and the Child Behavior Checklist: Is Small Beautiful? *Journal of Abnormal Child Psychology*, 27 (1), p17-24
- Gottman, J. M., & Parker, J. G (1986). *Conversations of friends*. New York: Cambridge University Press.
- Green, E. E., Green, A. M., & Walters, E. D (1969). Feedback techniques for deep relaxation. *Psychophysiology*, 6, p371-377.
- Green, K. D., Vosk, R., Forehand, R., & Beck, S. J (1981). An examination of the differences among sociometrically identified accepted, rejected, and neglected children. *Child Study Journal*, 11, p117-124.
- Gresham, F. M., Gansle, K. A., Noell, G. H., Cohen, S., & Rosenbaum, S (1993). Treatment integrity of school-based behavioural intervention studies: 1890-1990. *School Psychology Review*, 22, p254-272.
- Gruter, M., & Masters, R. D (1986) Ostracism as a social and biological phenomenon: An introduction. *Ethology and Sociobiology*, 7, p149-158.
- Guay, F., Larose, S., & Biovin, M (2004). Academic self-concept and educational attainment level: A ten-year longitudinal study. *Self and Identity*, 3 (1), p53-68.
- Hall, E., Hall, C., Stradling, P., & Young, D (2006). *Guided Imagery: Creative Interventions in Counselling and Psychotherapy*.
- Hall, H (1984). Imagery and cancer. In A. A. Sheikh (Ed.), *Imagination and healing*, New York: Baywood.
- Hall, H (1990). Imagery, psychoneuroimmunology, and the psychology of healing. In R. G. Kunzendorf and A. A. Sheikh (Eds.), *The psychophysiology of mental imagery: Theory, research and application*. New York: Baywood.
- Hall, H., & Kvarnes, R (1991). Behavioral intervention and disease: possible mechanisms. In J. G. Carlson and A. R. Seifert (Eds.), *International perspectives on self-regulation and health* (p183-195). New York: Plenum.

Hammersley, M (2000). The relevance of qualitative research. *Oxford Review of Education*, 26 (3&4), p393-405.

Hansford, B. C., & Hattie, J. A (1982). The relationship between self and achievement/performance measures. *Review of Educational Research*, 52 (1), p123-142.

Harrist, A. W., & Bradley, K. D (2003). "You can't say you can't play": intervening in the process of social exclusion in the kindergarten classroom. *Early Childhood Research Quarterly*, 18, p185-205.

Hart, J. G (1985). LAWSEQ: Its relation to other measures of self-esteem and academic ability. *British Journal of Educational Psychology*, 55, p167-169.

Harter, S (1983). Developmental perspectives on the self-esteem. In P. H. Mussen (Series Ed.) & H. M. Hetherington (Vol. Ed.), *Handbook of child psychology: Vol. 4. Socialization, personality and social development* (4th ed), p275-386. New York: Wiley.

Harter, S (1982). The perceived self-competence scale for children. *Child Development*, 53, p87-97.

Harter, S (1993). Causes and consequences of low self-esteem in children and adolescents. In R. F. Baumeister (ed), *Self-esteem: The puzzle of low self-regard*, p87-117. New York: Plenum Press.

Harter, S (1999). *The construction of the self*. New York: The Guilford Press.

Harter, S (2004). The development emergence of self-esteem: Individual differences in change and stability. In D. Mroczek & T. Little (Eds), *The handbook of personality development*. Hillsdale, NJ: Lawrence Erlbaum Associates Inc.

Harter, S (2006). The development of self-esteem. In M. H. Kernis (Ed), *Self-esteem issues and answers*, p144-150. New York: Psychology Press.

Hartup, W. W (1983). Peer relations. In P. H. Mussen (Series Ed.) & E. M. Hetherington (Vol. Ed.), *Handbook of child psychology: Vol. 4. Socialization, personality, and social development*, p103-198. New York: Wiley.

Hendricks, G., & Roberts, T (1977). *The second centering book*. Englewood Cliffs, NJ: Prentice Hall.

Hirschi, T (1969). *Causes of delinquency*. Berkeley, CA, University of California Press.

Hodges, E. V. E., & Perry, D. G (1996). Victims of peer abuse: An overview. *Journal of Emotional and Behavioral Problems*, 5, p23-28.

Hodges, E. V. E., Malone, M. J. Jr., & Perry, D. G (1995). Behavioral and social antecedents and consequences of victimisation by peers. In N. R. Crick (Chair), *Recent trends in the study of peer victimization: Who is at risk and what are the consequences?* Symposium conducted at the biennial meeting of the Society for Research in Child Development, Indianapolis, IN.

Hodges, E. V. E., Malone, M. J. Jr., & Perry, D. G (1997). Individual risk and social risk as interacting determinants of victimization in the peer group. *Developmental Psychology*, 33, p1032-1039.

Holden-Lund, C (1988). Effects of relaxation with guided imagery on surgical stress and wound healing. *Research in Nursing and Health*, 11, p235-244.

Holt, R. R (1964). Imagery: The return of the ostracized. *American Psychologist*, 19, p254-264.

Huck, S. W., & McLean, R. A (1975). Using a repeated measures ANOVA to analyze the data from a pretest-posttest design: A potentially confusing task. *Psychological Bulletin*, 82 (4), p511-518.

Hughes, H. M (1984). Measures of self-concept and self-esteem for children ages 3-12 years: A review and recommendations. *Clinical Psychology Review*, 4, p657-692.

Hymel, S., Bowker, A., & Woody, E (1993). Aggressive versus withdrawn unpopular children: Variations in peer and self-perceptions in multiple domains. *Child Development*, 64, p879-896.

Ireson, J., & Hallam, S (2001). *Ability grouping in education*. London: Paul Chapman Publishing.

Jacobsen, E (1929). Electrical measurements of neuromuscular states during mental activities: Imagination of movement involving skeletal muscle. *American Journal of Physiology*, 91, p597-608.

James, W (1950). *The principles of psychology*. New York: Dover. Original work published in 1890.

Janis, I. L., & Field, P (1959). Sex differences and personality factors related to persuasibility. In C. Hoyland and I. L. Janis (Eds.), *Personality and Persuasibility* p55-68. New Haven, CT: Yale University Press.

Jarvinien, P. J., & Gold, S. R (1981). Imagery as an aid in reducing depression. *Journal of Clinical Psychology*, 37 (3), p523-529.

Janoski, M. L., & Kugler, J (1987). Relaxation, imagery, and neuroimmunomodulation. In B. D. Jankovik, B. M. Markovik, and N. H. Spector (Eds.). Neuroimmune interactions: Proceedings of the 2nd international workshop on neuromodulation. *Annals of the New York Academy of Sciences: Vol. 496*, p722-730. New York: New York Academy of Sciences.

Joiner, T. E., Alfano, M. S., & Metalsky, G. J (1992). When depression breeds contempt: Reassurance seeking, self-esteem, and rejection of depressed college students by their roommates. *Journal of Abnormal Psychology*, 101, p165-173.

Jupp, J. J., & Griffiths, M. D (1990). Self concept changes in shy, socially isolated adolescents following social skills training emphasising role plays. *Australian Psychologist*, 25, p165-177.

Kazdin, A. E (1990). Childhood depression. *Journal of Child Psychology and Psychiatry*, 31, p121-160.

Kazdin, A. E (2003). *Research design in clinical psychology (4th edition)*. Boston, MA: Allyn & Bacon.

Killen, M., & Stangor, C (2001). Children's social reasoning about inclusion and exclusion in gender and race peer group contexts. *Child Development*, 72 (1), p174-186.

Kistner, J., Metzler, A., Gatlin, D., & Risi, S (1993). Classroom racial proportions and children's peer relations: Race and gender effects. *Journal of Educational Psychology*, 85, p446-451.

Knapp, T. R., & Schafer, W. D (2009). From gain score t to ANCOVA F (and vice versa). *Practical Assessment, Research and Evaluation*, 14 (6), p1-7.

Koenig, L (2001). *Keeping your child safe at school: what every parent needs to know about mobbing, bullying and peer rejection*. Baton Rouge, LA, Smart Family Press.

Kristjánsson, K (2007). Justified self-esteem. *Journal of Philosophy of Education*, 41 (2), p247-261.

Kruse, R. J., & Render, G. F (1986). The relationship between student self-concepts and the use of a fantasy journey. *Educational and Psychological Research*, 6 (1), p17-25.

Kuch, K., Swinson, R. P., & Kirby, M (1985). Post-traumatic stress disorder after car accidents. *Canadian Journal of Psychiatry*, 30, p426-427.

Kugle, C. L., Clements, R. O., & Powell, P. M (1983). Level and stability of self-esteem in relation to academic behavior of second graders. *Journal of Personality and Social Psychology*, 44, p201-207.

Kupersmidt, J., & Cowie, J. D (1990). Preadolescent peer status, aggression, and school adjustment as predictors of externalising problems in adolescence. *Child Development*, 61, p1350-1362.

Ladd, G. W (1983). Social networks of popular, average and rejected children in school settings. *Merrill-Palmer Quarterly*, 29, p282-307.

Ladd, G. W (1990). Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development*, 61, p1081-1100.

Ladd, G. W., & Asher, S. R (1985). Social skill training and children's peer relations: Current issues in research and practice. In L. L'Abate & M. Milan (Eds.), *Handbook of social skill training*, p219-244. New York: Wiley.

Lantz, M. S., Buchalter, E. N., & McBee, L (1997). The wellness group: A novel intervention for coping with disruptive behavior in elderly nursing home residents. *The Gerontologist*, 37 (4), p581-556.

Lawrence, D (1981). Development of a self-esteem questionnaire. *British Journal of Educational Psychology*, 51, p245-249.

Lawrence, D (1983). Improving reading and self-esteem. Unpublished, PhD thesis, University of Western Australia.

Lawrence, D (1987), *Enhancing self-esteem in the classroom*. London: Paul Chapman.

Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68, p518-530.

Ledingham, J. E., & Schwartzman, A. E (1984). A 3-year follow-up of aggressive and withdrawn behaviour in childhood: Preliminary findings. *Journal of Abnormal Child Psychology*, 12, p157-168.

Leets, L., & Sunwolf, (2005) Adolescent rules for social exclusion: when is it fair to exclude someone else? *Journal of Moral Education*, 34(3), p343-362.

Lehtonen, M (2006). Deliberative democracy, participation, and OECD peer reviews of environmental policies. *American Journal of Evaluation*, 27, 185-200.

Luthar, S. S., Cicchetti, D., & Becker, B (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71, 543–562.

Luthar, S. S., & McMahon, T. J (1996). Peer reputation among inner-city adolescents: Structure and correlates. *Journal of Research on Adolescence*, 6, p581-603.

- Leuner, H (1977). Guided affective imagery: An account of its development. *Journal of Mental Imagery*, 1 (1), p73-91
- Lord, F. M (1967). A paradox in the interpretation of group comparisons. *Psychological Bulletin*, 72, p304-305
- MacDonald, G., & Leary, M. R (2005). Why does social exclusion hurt? The relationship between social and physical pain. *Psychological Bulletin*, 131 (2), p202-223.
- Maclellan, (2005). Should we raise pupil's self-esteem? *Education 3-13*, 33 (1), p7-12.
- Maines, B., & Robinson, G (1988). *B/G-Steem - User Manual and CD-ROM: A Self-Esteem Scale with Locus of Control Items*. Paul Chapman Educational Publishing: Lucky Duck Books.
- Manstead, A, S, R., & Semin, G. R (1988). Methodology in social psychology: turning ideas into action. In M. Hewstone, W. Stoebe, J-P. Codol & G. M. Stephenson, eds, *Introduction to Social Psychology*. Oxford: Blackwell.
- Manyande, A., Berg, S., Gettins, D., Stanford, C., Mazhero, S., Marks, D. F., & Salmon, P (1995). Preoperative rehearsal of active coping imagery influences subjective and hormonal responses to abdominal surgery. *Psychosomatic Medicine*, 57, p177-182.
- Marino, J., Gwynn, M. I., & Spanos, N. P (1989). Cognitive mediators in the reduction of pain: The role of expectancy, strategy use, and self-presentation. *Journal of Abnormal Psychology*, 98, p256-262.
- Marsh, H. W., & Ayotte, V (2003). Do multiple dimensions of self-concept become more differentiated with age? The differential Distinctiveness Hypothesis. *Journal of Educational Psychology*, 95, p687-706.
- Marsh, H., Byrne, B., & Shavelson, R (1988). A multifaceted academic self-concept: its hierarchical structure and its relation to academic achievement. *Journal of Educational Psychology*, 80, p366-380.

- Marsh, H. W., Craven, R. G., & Martin, A. J (2006). What is the nature of self-esteem? Unidimensional and multidimensional perspectives.
- Maruyama, G., Rubin, R. A., & Kingsbury, G. G (1982). Self-esteem and educational achievement: Independent constructs with a common cause? *Journal of Personality and Social Psychology*, 40, p962-975.
- Maslow, A. H (1968). *Toward a psychology of being*. New York: Van Nostrand.
- Maxwell, J. A (2004). Causal explanation, qualitative research, and scientific enquiry in education. *Educational Researcher*, 33 (1), p3-11.
- McDaniel, J. S (1996). Stressful life events and psychoneuroimmunology. In T. W. Miller (Ed.), *Theory and assessment of stressful life events* (p3-36). Madison, WI: International Universities Press.
- McFarlane, A. H., Bellissimo, A., & Norman, G. R (1995). The role of family and peers in social self-efficacy: Links to depression in adolescence. *American Journal of Orthopsychiatry*, 65, p402-410.
- McGuire, J. M (1973). Aggression and sociometric status with pre-school children. *Sociometry*, 36, p542-549.
- Meichenbaum, D (1978). Why does using imagery in psychotherapy lead to change? In J. L. Singer & K. S. Pope (Eds), *The power of human imagination*, p381-394. New York: Plenum.
- Mertens, D. M (2010). *Research and Evaluation in Education and Psychology: Integrating Diversity with Quantitative, Qualitative, and Mixed Methods*. CA: Sage Publications.
- Miller, G. E., & Cohen, S (2001). Psychological interventions and the immune system: A meta-analytic review and critique. *Health Psychology*, 20 (1), p47-63.
- Miller, D. M., & Moran, T (2005). One in three? Teachers' attempts to identify low self-esteem children. *Pastoral Care in Education*, 23 (4), p25-30.

- Miller, D., & Parker, D (2006). "I think its low self-esteem". Teachers' judgements: A cautionary tale. *Education*, 34 (1), p19-25.
- Morone, N. E., & Greco, C. M (2007). Mind-body interventions for chronic pain in older adults: A structured review. *Pain Medicine*, 8 (4), p365-374.
- Mosley, J (1998). *Turn your school round: Circle-time approach to the development of self-esteem and positive behaviour in the primary staffroom, classroom and playground*. LDA Publishing.
- Mosley, J (2004). *Turn your school round: the foundation on which to build the self-esteem, emotional literacy and relationships of the whole school community*. Cambridge. LDA.
- Mruk, C (1999). *Self-esteem: research, theory and practice*. London: Free Association Books.
- Muijs, D. R (1997). Predictors of academic achievement and academic self-concept: A longitudinal perspective. *British Journal of Educational Psychology*, 67 (3), p263-277.
- Muijs, D., & Reynolds, D (2001). *Effective Teaching*. London: Paul Chapman Publishing.
- Munthe, E (1989). "Bullying in Scandanavia". In Roland, E., & Munthe, E (eds) *Bullying: An International Perspective*. London: David Fulton Publishers.
- Murray-Edwards, D. M (2002). *Voice Massage: Scripts for guided imagery*. Pittsberg: Oncology Nursing Society.
- Myrick, R. D., & Myrick, L. S (1993). Guided imagery: from mystical to practical. *Elementary School Guidance and Counseling*, 28, p62-70.
- National Foundation for Educational Research (NFER) (1985). *Mathematics 8-12: Teachers' Guide*. Slough, NFER-Nelson.
- National Foundation for Educational Research (NFER) (1987a). *Mathematics 7*. Windsor, NFER-Nelson.

Newton, C., & Wilson, D (2005). *Creating circles of friends: A peer support and inclusion workbook*. UK: Inclusive Solutions.

Noaks, J., & Noaks, L (2009). School-based peer mediation as a strategy for social inclusion. *Pastoral Care in Education*, 27 (1), p53-61.

O'Neil, R., Welsh, M., Parke, R. D., Wang, S., & Strand, C (1997). A longitudinal assessment of the academic correlates of early peer acceptance and rejection. *Journal of Clinical Child Psychology*, 26, p290-303.

Olnes, K., Culbert, T., & Uden, D (1989). Self-regulation of salivary immunoglobulin A by children. *Pediatrics*, 83, p66-71.

Olweus, D (1978). *Aggression in the schools. Bullies and whipping boys*. Washington, D. C., Wiley.

Olweus, D (1990). Bullying among school children. In K. Hurrelmann & F. Loesel (Eds.), *Health hazards in adolescence*, p259-257. Berlin, Germany: Walter De Gruyter.

Olweus, D (1992). Victimization among schoolchildren: Intervention and prevention. In Albee, G., W., Bond, L, A., Monsey, T. V., & Cook (Eds), *Improving children's lives: Global perspectives on prevention. Primary prevention of psychopathology, Vol. 14*, p279-295. US: Sage Publications.

Olweus, D (1994). Bullying at school: Long-term outcomes for the victims and an effective school-based intervention program. In R. Huesmann (Ed.), *Aggressive behavior: Current perspectives*, p97-130. New York: Plenum.

Olweus, D (1996). *The revised Olweus bully/victim questionnaire*. Bergen: University of Bergen.

Omizo, M. M., Omizo, S. A., & Kitaoko, S. K (1998). Guided imagery and cognitive imagery to enhance self-esteem among Hawaiian children. *Journal of Multicultural Counselling and Development*, 26, p52-62.

Overholster, J. C., Adams, D. M., Lehnert, K. L., & Brinkman, D. C (1995). Self-esteem deficits and suicidal tendencies among adolescents. *Journal of American Academy of Child Adolescent Psychiatry*, 34, p919-928.

Owens, L., Shute, R., & Slee, P (2000). "Guess what I just heard!": Indirect aggression among teenage girls in Australia. *Aggressive Behavior*, 26, p67-83.

Parker, J. G., & Asher, S. R (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin*, 102 (3), p357-389.

Paulhus, D. L (2002). Socially desirable responding: The evolution of a construct. In H. J. Braun & D. N. Jackson (Eds.), *The role of constructs in psychological and educational measurements*, p37-48. Mahwah, NJ: Erlbaum.

Petticrew, M., & Roberts, H (2007). *Systematic reviews in the social sciences: A Practical Guide*. Blackwell Publishing.

Pickett, C., & Clum, G. A (1982). Comparative treatment strategies and their interaction with locus of control in the reduction of postsurgical pain and anxiety. *Journal of Consulting and Clinical Psychology*, 50 (3), p439-441.

Piers, E. V., & Harris, D. B (1969). *The Piers-Harris children's self-concept scale*. Nashville, TN: Counselor Recordings and Tests.

Plummer, D (1998). *Using interactive imagework with children - walking on the magic mountain*. Jessica Kingsley Publishers.

Pope, A. W., McHale, S. M., & Craighead, W. E (1988). *Self-esteem enhancement with children and adolescents*. Boston, MA, Allyn & Bacon.

Post-White, J (2002). Clinical indication for use of imagery in oncology practice. In D. M. Edwards (Ed.), *Voice massage: Scripts for guided imagery*. Oncology Nursing Society: Pittsburgh, PA.

Pottebaum, S. M., Keith, T. Z., & Ehly, S. W (1986). Is there a causal relationship between self-concept and academic achievement? *Journal of Educational Research*, 79 (3), p140-144.

Putallaz, M., & Gottman, J. M (1981). Social skills and group acceptance. In S. R. Asher & M. J. Gottman (Eds.), *The development of children's friendships*, p116-149. Cambridge: Cambridge University Press. Roberts & Monroe, 1999

Pyszczynski, T., Greenberg, J., Solomon, S., Arndt, J., & Schimel, J (2004). Why do people need self-esteem? A theoretical and empirical review. *Psychological Bulletin*, 130 (3), p435-468.

Richardson, A (1994). *Individual differences in imaging: Their measurement, origins, and consequences*. Amityville, NY: Baywood.

Robins, L., & Rutter, M (1990). *Straight and devious pathways from childhood to adulthood*. Cambridge University Press: Cambridge.

Robinson, J. P., Shaver, P. R., & Wrightsman, L. S (1991). *Measures of personality and psychological attitudes*. Academic Press: American Psychological Association.

Robson, C (2002) *Real World Research* (2nd edition). Blackwell Publishing.

Rodkin, P. C., Farmer, T. W., Pearl, R., & Van Acker, R (2000). Heterogeneity of popular boys: Antisocial and prosocial configurations. *Developmental Psychology*, 36, p14-24.

Roethlisberger, F. J., & Dickson, W. J (1941). *Management and the worker: An account of a research program conducted by the Western Electric Company, Hawthorne Works, Chicago*. Cambridge MA: Harvard University Press.

Roff, M., Sells, S. B., & Golden, M. M (1972). *Social adjustment and personality development in children*. Minneapolis: University of Minnesota Press.

Roffe, L., Schmidt, K., & Ernst, E (2005). A systematic review of guided imagery as an adjuvant cancer therapy. *Psych-Oncology*, 14, p607-617.

Rogers, C. R (1961). *On becoming a person*. Boston, MA, Houghton Mifflin.

Rosenberg, M (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

- Rosenberg, M., Schooler, C., Schonenhach, C., & Rosenberg, F (1995). Global self-esteem and specific self-esteem: different concepts, different outcomes. *American Sociological Review*, 60, p141-156.
- Rosnow, R. L., Rosenthal, R., & Rubin, D. B. (2000). Contrasts and correlations in effect-size estimation. *Psychological Science*, 11, p446-453.
- Rowntree, D (1981). *Statistics without tears: An introduction for non-mathematicians*. St Ives: Penguin.
- Rubin, K (2002). *The friendship factor*. Viking/Penguin.
- Rutter, M (1979). Protective factors in children's responses to stress and disadvantage. In M. W. Kent & J. E. Rolf (Eds.), *Primary prevention in psychopathology: Social competence in children* Vol. 8, p49–74. Hanover, NH: University Press of New England.
- Salmivalli, C., Kaukiainen, A., Kaistaniemi, L., & Lagerspetz, K. M. J (1999). Self-evaluated self-esteem, peer-evaluated self-esteem, and defensive egotism as predictors of adolescents' participation in bullying situations. *Personality and Social Psychology Bulletin*, 25, p1268-1278.
- Schneider, D. J., & Turkat, D (1975). Self-presentation following success or failure: Defensive self-esteem models. *Journal of Personality*, 43, p127-135.
- Schneider, J., Smith, C. W., Minning, C., Whitcher, S., & Hermanson, J (1990). Guided imagery and immune system function in normal subjects: A summary of research findings. In R. G. Kunzendorf (Ed.), *Mental Imagery*, p179-181. New York: Plenum.
- Schwartz, D., Dodge, K. A., & Coie, J. D (1993). The emergence of chronic peer victimization in boys' play groups. *Child Development*, 64, p1755-1772.
- Shavelson, R. J., & Bolus, R (1982). Self-concept: the interplay of theory and methods. *Journal of Educational Psychology*, 74 (1), p3-17.
- Shavelson, R. J., Hubner, J. J., & Stanton, J. C (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, 46, p407-441.

Sheikh, A. A., & Kunzendorf, R. G (1984). Imagery, physiology and psychosomatic illness. In A. A. Sheikh (Ed.), *International review of mental imagery*, Vol. 1, p95-138. New York: Human Science Press.

Siegel, B. S (1986). *Love, medicine and miracles*. New York: Harper & Row.

Sklare, G. B., Sabella, R. A., & Petrosko, J. M (2003). A preliminary study of the effects of group solution-focused guided imagery on recurring individual problems. *Journal for Specialists in Group Work*, 28 (4), p370-381.

Smith, A., & Shenton, O (1996). *Accelerated learning in the classroom* (4th ed). Network Educational Press Ltd.

Smith, D (1990). Imagery in sport: An historical and current overview. In r. G. Kunzendorf (Ed), *Mental imagery*, p215-224. New York: Plenum.

Smith, R (2006). On diffidence: The moral psychology of self-belief. *Journal of Philosophy of Education*, 40 (1), p51-62.

Stanley, L., & Arora, C. M. J (1998). Social exclusion amongst adolescent girls: Their self-esteem and coping strategies. *Educational Psychology in Practice*, 14 (2), p94-100

Stephens, R. L (1992). Imagery: A treatment for nursing student anxiety. *Journal of Nursing Education*, 31 (7), P314-320.

Storr, A (1997). *Solitude*. London: HarperCollins.

Swann, W. B., Stein-Seroussi, A., & Giesler, R. B (1992). Why people self-verify. *Journal of Personality and Social Psychology*, 62, p392-401.

Tafarodi, R. W., & Milne, A. B (2002). Decomposing global self-esteem. *Journal of Personality*, 70 (4), p443-483.

Tafarodi, R. W., & Swann, W. B, Jr (1995). Self-liking and self-competence as dimensions of global self-esteem: initial validation of a measure. *Journal of Personality Assessment*, 65, p322-342

Talbot, M (2002). Girls just want to be mean. *New York Times Magazine*, February 24th, p24-29.

Teddlie, C., & Tashakkori, A (2009). *Foundations of mixed methods research*. Thousand Oaks, CA: Sage.

Thalheimer, W., & Cook, S. (2002). *How to calculate effect sizes from published research articles: A simplified methodology*. Retrieved 9th April 2010 from http://work-learning.com/effect_sizes.htm.

Thienpont, K., & Cliquet, R. L (1999). *In-group/out-group behaviour in modern societies: An evolutionary perspective*. Brussel: Vlaamse Gemeenschap.

Tice, D. M (1993). The social motivations of people with low self-esteem. In R. F. Baumeister (Ed.) *Self-esteem: The puzzle of low self-regard*, p37-54. New York: Plenum.

Trakhtenberg, E. C (2008). The effects of guided imagery on the immune system: A critical review. *International Journal of Neuroscience*, 118, p839-855.

Trope, Y (1986). Self-enhancement and self-assessment in achievement behaviour. In Y. Trope (Ed.), *Handbook of motivation and cognition: Foundations of social behaviour*, p350-378. New York: Guilford Press.

Trzesniewski, K. H., Donnellan, M. B., & Robbins, R. W (2003) Stability of self-esteem across the life span. *Journal of Personality and Social Psychology*, 84, p205-220.

Trzesniewski, K. H., Donnellan, M. B., Robins, R. W., Moffitt, T. E., & Caspi, A (2002, Study 1). *Do juvenile delinquents have high or low self-esteem?* Paper presented at the annual meeting of the Society for Personality and Social Psychology, Savannah, GA.

Turk, D., Meichenbaum, D. M., & Genest, M (1983). *Pain and behavioral medicine: A cognitive-behavioral perspective*. New York: Guilford Press.

Tusek, D., Church, J. M., & Fazio, V. W (1997a). Guided imagery as a coping strategy for perioperative patients. *Journal of Association of Perioperative Registered Nurses (AORN)*, 66 (4), P644-649.

Tusek, D., Church, J. M., Strong, S. A., Grass, J. A., & Fazio, V. W (1997b). Guided imagery: A significant advance in the care of patients undergoing elective colorectal surgery. *Dis. Colon. Rectum*, 40, p172-178.

UK Social Exclusion Unit (2000a). *National strategy for neighbourhood renewal: A framework for consultation*. Cabinet Office: London

UK Social Exclusion Unit (2000b). *Report of policy action team12 on young people*. The Stationery Office: London

UK Social Exclusion Unit (2000c). *Report of policy action team8: Anti-social behaviour*. The Stationary Office: London

UK Social Exclusion Unit (2000d). *Minority ethnic issues in social exclusion and neighbourhood renew*. The Cabinet Office: London

UK Social Exclusion Unit (2001). *National strategy for neighbourhood renewal: Policy action team audit*. Cabinet Office: London.

Underwood, M. K., Scott, B. L., Galperin, M. B., Bjornstad, G. J., & Sexton, A. M (2004). An observation study of social exclusion under varied conditions: Gender and developmental differences. *Child Development*, 75 (5), p1538-1555.

Vargas, L. A., & Montoya, M. E (2009). Involving minors in research: Ethics and law within multicultural settings. In D. M. Mertens & P. E. Ginsberg (Eds). *Handbook of social research ethics*, p507-518. Thousand Oaks, CA: Sage.

Wang, M. C., Haertel, G. D., & Wahlberg, H. J (1994). Educational resilience in inner cities. In M. C. Wang & E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects*, p45–72. Hillsdale, NJ: Erlbaum.

Warden, D., Christie, D., & Stevens, C (1994). Differential perceptions of bullying and prosocial behaviour. *Proceedings of the British Psychological Society*, 3 (1), p48.

- Watson, M., & Marvell, C (1992). Anticipatory nausea and vomiting among cancer patients. A review. *Psychology and Health*, 6, p97-106.
- Wells, L. E., & Marwell, G (1976). *Self-esteem: Its conceptualisation and measurement*. Beverly Hills, CA: Sage Publications.
- Wells, N (1989). Management of pain during abortion. *Journal of Advanced Nursing*, 14, p56-62.
- Wentzel, K. R., & Asher, S. R (1995). The academic lives of neglected, rejected, popular, and controversial children. *Child Development*, 66 (3), p754-763.
- Werner, E., & Smith, R (1982). *Vulnerable but invincible: A study of resilient children*. New York: McGraw-Hill.
- West, C. R., Fish, J. A., & Stevens, J. A (1980). General self-concept, self-concept of academic ability and school achievement. *Australian Journal of Education*, 24, p194-213.
- Wheeler, E (2004). Confronting social exclusion and bullying. *Childhood Education*, 81 (1), p321-322.
- White, R (1963). Ego and reality in psychoanalytic theory: a proposal regarding independent ego energies. *Psychological Issues*, 3, p125-150.
- Wiggins, J. S., & Winder, C. L (1961). The Peer Nomination Inventory: An empirically derived sociometric measure of adjustment in preadolescent boys. *Psychological Reports*, 9, p643-677.
- Wright, D. M (2003). Making friends with your data: Improving how statistics are conducted and reported. *British Journal of Educational Psychology*, 73, p123-136.
- Wylie, R. C (1979). *The self-concept: Theory and research on selected topics*. Lincoln: University of Nebraska Press.
- Zeller, J., McCain, N., & Swanson, B (1996). Psychoneuroimmunology. An emerging framework for nursing research. *Journal of Advance Nursing*, 23, p657-664.

Electronic sources

OFSTED reports were accessed at http://www.ofsted.gov.uk/oxcare_providers/list

SPSS (Version 17) is available from <http://www.spss.com/software/statistics>
(Version 17 has since been superseded by Version 18)

- Appendix 1** Search strategy and restrictions used in first systematic search
- Appendix 2** Blank copy of Lawseq questionnaire (taken from Lawrence, 1982)
- Appendix 3** Blank copy of Social Inclusion Survey (taken from Frederickson & Graham, 1999)
- Appendix 4** Blank copy of Strengths and Difficulties Questionnaire (Goodman, 1997)
- Appendix 5** Questionnaire used to gather qualitative data from facilitators
- Appendix 6** Questionnaire used to gather qualitative data from participants
- Appendix 7** Permission letter sent to parents prior to screening session
- Appendix 8** PowerPoint presentation used in screening session (*electronic resource – see CD inside the back of this study*)
- Appendix 9** Permission letter sent to parents prior to intervention
- Appendix 10** Session plans (*electronic resource – see CD inside the back of this study*)
- Appendix 11** Workbook used by participants during guided imagery sessions
- Appendix 12** Handout given to facilitators during training session (*electronic resource – see CD inside the back of this study*)
- Appendix 13** Copy of notes made during assessment of treatment fidelity
- Appendix 14** Declaration of consent form administered to participants

Search strategy and restrictions used in first systematic search

Ovid: Search Form

Page 1 of 4

21/7/09 12:35pm

Wolters Kluwer
Health

OvidSP

Database: Law, Crime

AND

Database: Nursing & Learning

Index

English

Language

Display

Results

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Search History (17 searches) (Click to Clear)

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wellness" or 3410 professional education & training or 3550 academic learning & achievement)			
Combine selections with:			
Save Search History			

Appendix 2 Blank copy of Lawseq questionnaire (taken from Lawrence, 1982)

Name:	School year: 4 5
School:	I am a: Girl Boy

Please wait for me to explain each question!

Please tick one box for each question!

	Question	Yes	No	Don't know
1	Do you think that your parents usually like to hear about your ideas?			
2	Do you often feel lonely at school?			
3	Do other children often break friends or fall out with you?			
4	Do you like team games?			
5	Do you think that other children often say nasty things about you?			
6	When you have to say things in front of teachers, do you usually feel shy?			
7	Do you like writing stories or doing creative writing?			
8	Do you often feel sad because you have nobody to play with at school?			
9	Are you good at mathematics?			
10	Are there lots of things about yourself you would like to change?			
11	When you have to say things in front of other children, do you usually feel silly?			
12	Do you find it difficult to make things with your hands?			
13	When you want to tell a teacher something do you usually feel silly?			
14	Do you often have to find new friends because your old friends are playing with someone else?			
15	Do you usually feel silly when you talk to your parents?			
16	Do other people often think that you tell lies?			

Appendix 3 Blank copy of Social Inclusion Survey (taken from Frederickson & Graham, 1999)

How much do you like to work with each person in your class?

[illegible][illegible]

How much do you like to play with each person in your class?

[illegible][illegible]

Appendix 4 Blank copy of Strengths and Difficulties Questionnaire (Goodman, 1997)

Strengths and Difficulties Questionnaire

T 4-16

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last six months or this school year.

Child's Name

Male/Female

Date of Birth.....

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive, cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often complains of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares readily with other children (treats, toys, pencils etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often has temper tantrums or hot tempers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rather solitary, tends to play alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally obedient, usually does what adults request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries, often seems worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly fidgeting or squirming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has at least one good friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often fights with other children or bullies them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often unhappy, down-hearted or tearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally liked by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easily distracted, concentration wanders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervous or clingy in new situations, easily loses confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often lies or cheats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Picked on or bullied by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often volunteers to help others (parents, teachers, other children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thinks things out before acting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steals from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gets on better with adults than with other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many fears, easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sees tasks through to the end, good attention span	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you have any other comments or concerns?

Appendix 5 Questionnaire used to gather qualitative data from facilitators

Name: Year group/s: 4 ☐ 5 ☐

Which session/s, if any, do you think the children enjoyed the most?

- Imagining being a Cat ☐
- Awards ceremony ☐
- Monster in the forest ☐
- Friendship fixer ☐
- Being the best person I can be ☐

Which session/s, if any, do you think has helped the children the most?

- Imagining being a Cat ☐
- Awards ceremony ☐
- Monster in the forest ☐
- Friendship fixer ☐
- Being the best person I can be ☐

How, if at all, do you think guided imagery (especially the session/s you just chose) helped the children (e.g. self esteem, confidence, social skills, transferable skills)?

Overall, how much do you think the sessions have helped the children at school?

- 1
- 2
- 3
- 4
- 5
- Not at all
- Don't know/middle
- A lot

☺ Thank you for taking part in these sessions! ☺

Appendix 6 Questionnaire used to gather qualitative data from participants

Name: **Year group:** 4 ☐ 5 ☐

Which session, if any, did you enjoy the most?

Imagining being a Cat	<input type="checkbox"/>	Awards ceremony	<input type="checkbox"/>
Monster in the forest	<input type="checkbox"/>	Friendship fixer	<input type="checkbox"/>
Being the best person I can be	<input type="checkbox"/>		

Which session, if any, do you think has helped you the most?

Imagining being a Cat	<input type="checkbox"/>	Awards ceremony	<input type="checkbox"/>
Monster in the forest	<input type="checkbox"/>	Friendship fixer	<input type="checkbox"/>
Being the best person I can be	<input type="checkbox"/>		

How, if at all, has guided imagery (especially the session you just chose) helped you?

Overall, how much do you think the sessions have helped you?

1	2	3	4	5
Not at all		Don't know/middle		A lot

☺ **Thank you for taking part in these sessions!** ☺

Appendix 7 Permission letter sent to parents prior to screening session

30th June 2009

Dear Parent/Guardian,

██████████ School has agreed to take part in a research project, looking at the effects that “guided imagery” can have on enhancing children’s self-esteem and social skills.

In guided imagery sessions, children are guided through adventures in their imaginations, and encouraged to think about their feelings and the things they could do to address the different situations. They also complete some short activities and group discussion. Each session is designed to be fun, and will encourage the children to use their imaginations creatively. The five sessions will take place within school time next term, and will be led by myself.

This project is being run by Sophie Woodward, the trainee educational psychologist who supports the school, as part of her doctoral training. She will be working under the supervision of ██████████ (University of Nottingham) and ██████████, senior educational psychologist at ██████████.

Sophie will visit school on 8th July to ask the children in Years 3 and 4 to complete three short questionnaires about how they feel about themselves and school. After this, approximately 12 children in each year group will be chosen to take part in the sessions – you will find out about this in September. **If you would prefer your child not to be considered to take part in this project, please return the slip below before 8th July.**

If you have any questions, please contact myself or Sophie Woodward on ██████████.

Many thanks,

SENCo

(Please return to your child’s class teacher by 8th July)

Child’s name: Class

I would prefer my child not to be considered to take part in the guided imagery project.

Signed

Appendix 9 Permission letter sent to parents prior to intervention

8th September 2009

Dear Parent/Guardian,

Guided Imagery research project

As you may remember, in the summer term you gave consent for your child to take part in a research project looking at the effects of “guided imagery” on children’s self-esteem and social skills. Sophie Woodward, Trainee Educational Psychologist, then visited school to ask children in Years 3 and 4 to complete three short questionnaires which have helped us to select a range of children to take part in the project. Thank you for allowing your child to take part in this.

Sophie and I feel your child could make a valuable contribution to this project and we would like to offer him/her the opportunity to take part in the five guided imagery sessions, either this term (autumn) or later this academic year. These sessions will take place in school time and will be led by [redacted] and [redacted], teaching assistants who are familiar to the children. In these sessions, children will be guided through adventures in their imaginations, and will be encouraged to think about their feelings and the things they could do to address different situations. They will also take part in some short activities and group discussions. Each session is designed to be fun, and will encourage children to use their imaginations creatively, which will help them in other aspects of their school work. The results of the project will be written up as a piece of research and the general findings discussed with school. Sophie would be happy to discuss your child’s work in the group with you on request.

If you are still happy for your child to take part in these sessions, please sign the permission slip below and return it to your child’s class teacher before If you have any questions, please contact myself on [redacted] or Sophie on [redacted].

Many thanks,

[redacted], Deputy Head/SENCo

Guided Imagery Research Project

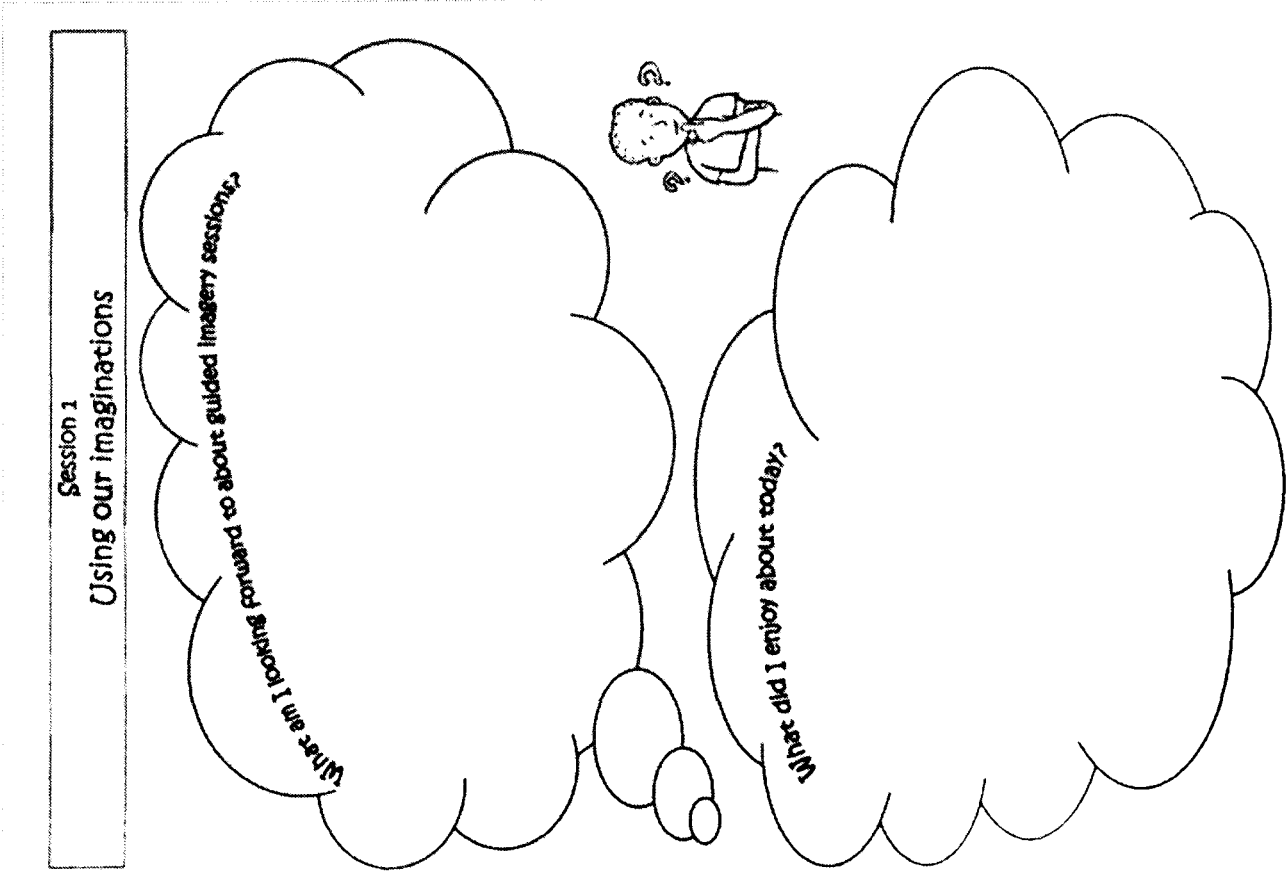
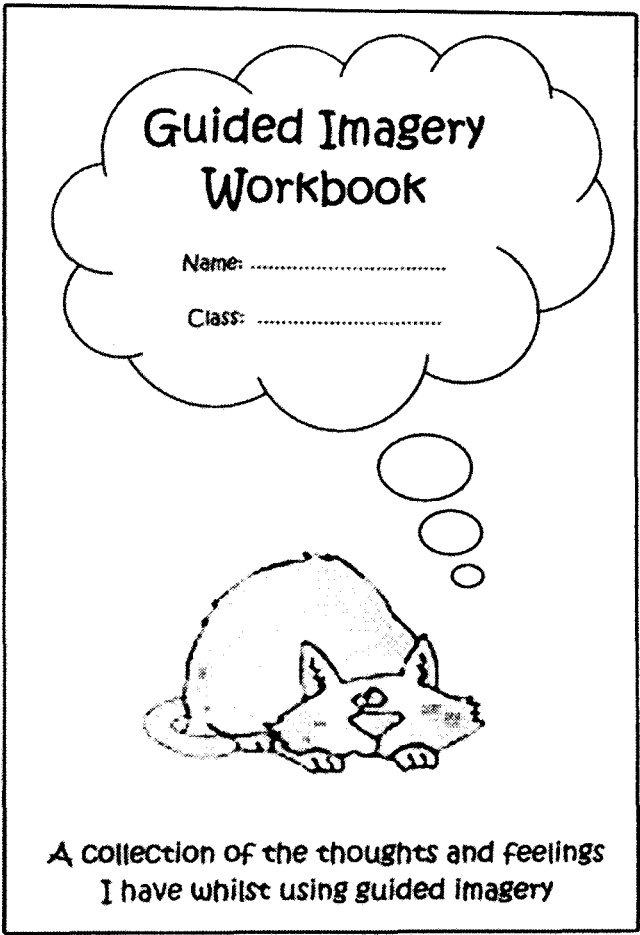
(Please return to your child’s class teacher before)

Child’s name: Class

I give permission for my child to take part in the guided imagery project.

Signed (Parent/Guardian) Date:

Thank you!



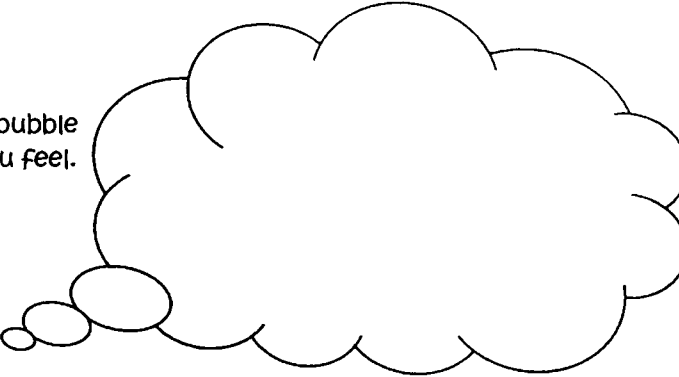
Session 2

What makes me a special person?

Who were your messages from?

(Affix an envelope here)

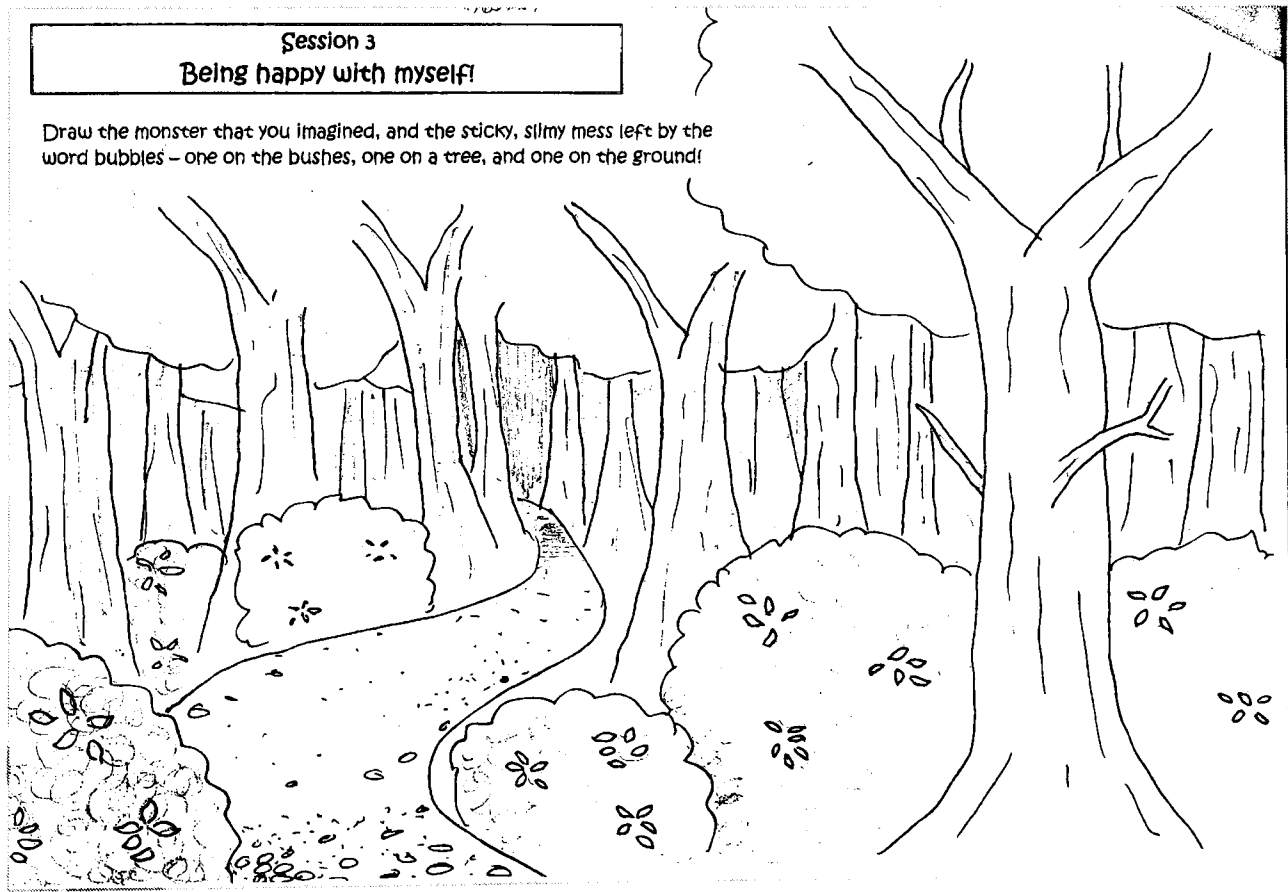
Write some words or sentences in the bubble to show how the messages made you feel.



Session 3

Being happy with myself!

Draw the monster that you imagined, and the sticky, slimy mess left by the word bubbles – one on the bushes, one on a tree, and one on the ground!




Session 4

Being a good friend

What did you say to the girls who had fallen out?

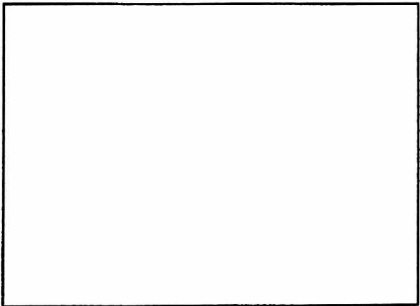
What did you say to the boys who were arguing?

What did you say to yourself?



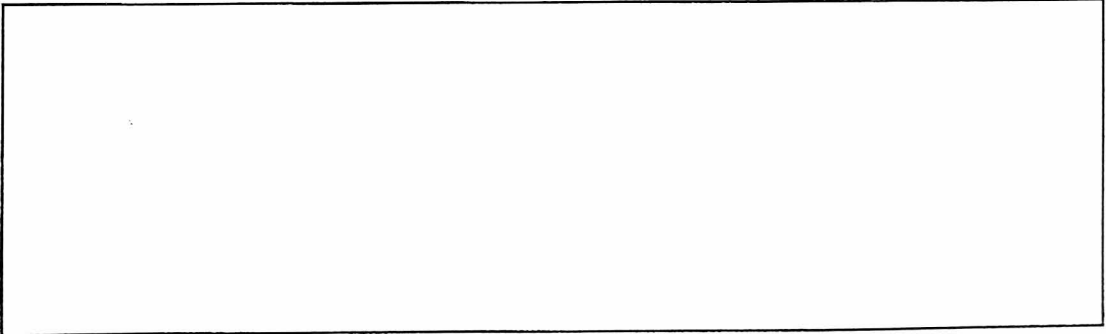
Session 5

Being the best person I can be!



Draw or write about how a part of your life would be like if someone could wave a magic wand...

Now draw or write about some of the little things you could do to try and make this happen...



Observation
Schedule 24/11/09

③ = question, instruction or script delivered exactly as specified
② = Q, I or S delivered partly as specified (rephrased)
① = reference made to Q, I or S, but not sufficiently similar to script to convey same meaning
④ = Q, I or S omitted

Session 3
Being happy with myself
(Began with grand rules)

2.30 Welcome and Recap

Welcome children and review last week's concepts/activities, e.g.:

Asked a linked to another child's answer - "And why did we read the letters?"

③ 2 1 0
③ 2 1 0
③ ② 1 0
③ 2 1 0

2.35 Warm Up - Jumble Sale Gems

Working in pairs, children are given an every day object that is in working order but not perfect (e.g. a scuffed shoe, sock with a hole in etc). Being mindful of the object's best points, the children try to "sell" the object to the rest of the group, perhaps turning the object's faults into "selling points". You will probably have to demonstrate this first.

③ 2 1 0

2.40 Today's session

So last time we thought about what makes us special and why we may be valued by others. In the game you've just played, you've taken ordinary everyday objects that had some things a little bit "wrong" with them, and made them appealing to us by turning those negatives round into positives. We can do the same with people.

Some elaboration reminding of previous session.

③ ② 1 0
→ with some elaboration

...and you can admit it can be a bit hard to make them seem happy.

③ ② 1 0

...and you can admit it can be a bit hard to make them seem happy.

③ ② 1 0
Joined qns together

2.45

Everyone has things about themselves that they're not 100% happy with; maybe it's something to do with how we look (e.g. I hate being smaller than my friends), maybe it's a habit we have (e.g. I can't stop biting my nails), or maybe it's something we don't like about the way we behave (e.g. I always cry if someone teases me. I wish I could just ignore them). Sometimes, we can change these things. But this can be difficult, or take a long time. Other times, though, we can't change these things, or we might just not want to. In this case we

③ 2 1 0

(P1)

have to learn to accept them as being part of us, and part of what makes you "you". This can also take a long time and can sometimes be hard, but one thing we can try and do to help is to not to let other people's comments hurt us.

③ 2 1 0

Today we're going to use our imaginations to imagine what it's like to cope really well with hurtful comments.

Some elaboration: by using all our feelings, like last time.
③ ② 1 0

Are you ready? Then off we go... (but music on)

2.50

Make sure you are sat in a comfortable position...make your whole body go loose...let your body sink into the chair so that you are as still as can be...begin to think about your toes. Relax your toes and feel them getting warm and heavy...let all the tightness just float away from your toe muscles so that they are not having to do any extra work...now let go of any tightness in your legs. Put all your attention into your legs and let the muscles relax, release, let go...when your legs are relaxed begin to think about your tummy. Feel the muscles in your tummy go soft, relaxing and releasing any tightness that may be there...feel your hands and arms getting warm and heavy as they rest comfortably by your sides...your fingers are very slightly curled but there is no tightness in them. Now think about your shoulders. It's easy to let our shoulders get tight when we're dashing about doing things all day, always in a rush. Gently raise your shoulders up towards your ears now and feel how hard the muscles have to work to keep them there...then let go...and feel the difference...notice how it felt when they were tight and how it feels when your shoulders are more relaxed...now let go even more than you thought you could...think about your face. Feel a smile start to come...let the smile spread and spread until it reaches your eyes...Now let it go so that all the muscles on your face gently relax and your forehead feels a little wider and higher than it did before...if you haven't already shut your eyes, let your eyes gently close now...feel them become heavier and heavier so you couldn't open them even if you tried...notice your breathing...Be very still as you feel the air going into your body when you breathe gently and quietly...Feel it as it slowly goes out again...in and out like waves on a seashore...in, and, out...in, and, out...now forget about your breathing and just feel yourself relaxing more and more...Imagine that there is a warm light coming up from the ground...It is flowing through your feet...through your legs...your body...your arms...your shoulders...and your head...it floats away through the top of your

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

(P2)

head and drifts upwards...now your body is still relaxed but your mind is awake and ready /

③ 2 1 0

...It is a beautiful, sunny day and you are walking through a forest, minding your own business. The forest is full of different sounds. Stop for a moment - what noises can you hear? What can you see around you? How are you feeling? You carry on walking, snapping twigs and crunching leaves as you go. After a while you come across a clearing in the forest. Sat on a rock in the clearing is a strange creature, which doesn't look very friendly but doesn't scare you either. You have never seen one of these creatures before, so you take a moment to look at it; it hasn't seen you. What does it look like? You need to walk past it, so you try and creep past whilst it is not looking. But as you try and get past, it hears you and steps into your way, standing in the middle of your path. You want to get past but it doesn't seem to want to let you through. How do you feel now? The strange creature begins to speak. "Well then, what do we have here?" it says, looking you up and down. Although you are not scared, you can just tell it's going to say something hurtful to you...except a strange thing happens when it opens its mouth. A big murky-looking bubble starts to appear from its mouth as it speaks, and you can see its words floating around inside it, as the creature says the hurtful comment. The bubble floats towards you and the creature looks at you, waiting for your response. And now another strange thing happens. You suddenly feel even calmer than you did before. All the feelings you had a moment ago have slipped away, and you feel confident and strong. Before the bubble has a chance to reach you, you pat it with your hand, sending it towards the bushes. The bubble bursts all over them to leave a slimy, sticky mess. Watch as the hurtful words seem to melt away. How do you feel now? You look back at the strange creature, wondering what it will do now. It looks confused and shocked, but now seems smaller than it did before. You look down at it as it opens its mouth to say another hurtful thing. Again, a big bubble forms and the words float around inside it. This time, as the bubble heads towards you, you use your hands to flick it away towards a tree. The bubble is burst by a branch. Look at the slimy mess dripping onto the forest floor. Watch as the hurtful words seem to melt away, disappearing into the mud. How do you feel now? You look again at the strange creature, with a smile on your face. It is now small enough for you to walk past, but you feel so confident and so strong that you want it to say one more hurtful comment, just to see if you can get rid of that too. The creature looks up at you and thinks hard of something it can say that will really hurt you. With a funny expression on its face the

③ 2 1 0

③ 2 1 0

③ 2 1 0

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③ 2 1 0

③ 2 1 0

③

creature opens its mouth, and sure enough another bubble grows, filling with the hurtful words as they leave the creature's mouth. As the bubble floats towards you the creature looks at you with wide eyes, sure that this will be the comment to make, bring you down. But you still feel confident and strong, and know there's no way the words will hurt you. This time, you just take a deep breath and blow the bubble away, watching with a smile as it lands on the ground, bursting to leave a pile of sticky, slimy mess. Again, the words disappear into the ground and the strange creature, now even tinier than before, runs over to the slimy mess, open-mouthed. As it pokes the slime, the creature is sucked into it and you watch, amazed, as it slowly disappears, like all of the hurtful words it said. Soon all that remains is a puddle of muddy sludge on the forest floor. Realising your path is clear, you step over the puddle and continue walking along the rest of the path and out of the forest. As you come out of the forest and back into the daylight you realise you are near school so you walk, along the pavement, up the street and towards the school gate. Open the gate and come into school, walk down the corridors to the hall for wherever the session is taking place and lie down quietly on the floor. It's time to slowly return to normal. Take three deep breaths... Now start to think about your toes and fingers, give them a little wriggle...keep your eyes closed and feel how your body is gradually back in the room where we started. Notice the feel of your clothes against your skin and your body touching the chair...still keep your eyes closed for a little while longer. Begin to listen to the sounds in the room and outside...now wriggle your toes and fingers again and when you're ready, have a big stretch and open your eyes slowly...and here you are back in the room! Just sit quietly for a while and then when everyone is ready we can talk about what happened.

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

③ 2 1 0

Bring the group together. Give the children some time to discuss their experiences with their partners, using the standard questions - favourite/least favourite part, feelings at start/end of adventure etc.

Ask the group:

Lizard
Chimpanzee + 2
Lion
Stripes, sharp claws!

③ 2 1 0

Yes
Cruel stuff

③ 2 1 0

Yellow + green Red words were
Rainbow dare red
Red + pink
multicoloured (13) (14)

③ 2 1 0

Before I was sad but now I am happy

Call like a school boy coming home
Proud, strong, happy

At the beginning of the session we talked about how everyone has things about themselves that they don't like, or things that others may "pick on". Perhaps when you find yourself thinking about these things in future, or if someone says something hurtful to you, perhaps you will be able to imagine the thought or words in a bubble that you can burst, like you imagined today. You know what you can do with bubbles now?
Chin - burst it with a pin / burst it / pop it. words go away. feel happy / funny

Happy bubble went
red line (unfused)

Happy (why)
What did you do to make words go?
When bigger than me, I showed it to me to
burst it and burst bubbles.

3 2 1 0

3 2 1 0

3 2 1 0

3 2 1 0

Activity

Show children the "forest" page of their workbooks. Ask them to draw the creature, and then to draw the sticky, slimy messes left by the word bubbles (one on the bushes, one on a tree, and one on the ground).

3 2 0 Ask the children how they feel now the session is over.

3 2 1 0

3 2 1 0

3 2 1 0

Umar
Mohamed
Iqra
Sanaah

55 x 3 = 115

Total Black (Instructions) =
Pink (Questions) =
Blue (Scripted) =

(95)

Name: Year group: 4 5

Guided Imagery

Thank you for agreeing to take part in these five sessions of guided imagery! Each session will last between 45 minutes and 1 hour and will take place during school time. Hopefully you will enjoy the activities and will find that they help you in other aspects of your school life.

Before we begin, please make sure you understand the following:

- Ⓢ You have the right to leave the group at any time
- Ⓢ Anything that is discussed within the group will be kept private, unless you say something that makes us feel you might be in danger
- Ⓢ When the sessions have finished, you will be asked to complete three questionnaires. These will be the same as the ones you completed last term. Like before, it is important that you try and answer every question, but you can choose to leave certain questions blank if you really do not feel happy answering them. Like before, the answers that you give to these questionnaires will be treated as private.

Please sign below to show you understand these things and are happy to take part in the sessions.

Signed: Date

Thank you!